with 50 plates —
some coloured —

foxed & stained

THE

ELEMENTS

OF

DRAWING,

IN ITS VARIOUS BRANCHES,

FOR THE

USE OF STUDENTS;

ILLUSTRATED

BY FIFTY ENGRAVINGS,

PLAIN AND COLOURED,

CONTAINING SEVERAL HUNDRED EXAMPLES, FROM THE WORKS OF THE GREATEST MASTERS.

BY GEORGE HAMILTON,

DRAWING MASTER.

A NEW EDITION.

LONDON:

PRINTED FOR SIR RICHARD PHILLIPS AND CO.

AND TO BE HAD OF ALL BOOKSELLERS, WITH THE FULL ALLOWANCE TO MASTERS AND SCHOOLS.

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SHACKELL AND BAYLIS, JOHNSON'S-COURT.

PREFACE.

No Art is so instructive to the mind, so improving to the taste, and so pleasing an employment, as that of Drawing. Exercise and improvement in it bring us into contact and intimate acquaintance with every kind of object; and an obligation to pourtray with accuracy, calls for the exertion of the most precise discrimination, and serves as a practical illustration of every species of knowledge. In truth, Drawing is an art, the acquisition of which, accords with the general principles of the Interrogative System in other branches of knowledge; and the Interrogative System itself, as a system of exercise and practice, is an exemplification of the principle of Drawing.

How vague are our conceptions of things before we have had occasion to draw their outline, shadow them, and colour them! Drawing is, in fact, a universal language, intelligible to all nations, and in its exercise it teaches universal knowledge. No study, therefore, is more beneficial to youth, none

more useful in middle age, and none more gratifying in the listless period of decrepitude.

As a branch of liberal, and even of necessary and useful education, this Art has long been generally recognized in considerable schools; and if it has not been introduced more generally, the omission may perhaps be ascribed to the total want of an Elementary Book, serving as an Assistant to the Master, and as a practical guide to the Student. Such a Volume is here submitted to the Public; its purpose being that of a book of examples, and a compendium of instruction for DRAWING MASTERS—a substitute for living Instructors in Schools, where their assistance cannot be procured or afforded,—and a means, in many necessary instances, of learning to draw *without a Master*.

It is the Author's presumption to believe, that the Student will be a Master of the Art as soon as he has produced perfect copies of the various examples contained in this Work, and has read and studied with attention the observations, instructions, and principles contained in the letter-press.

Aware, as the Author has repeatedly declared in the work, that none but superior examples should be copied and studied, he scarcely need to observe, that nearly the whole of his subjects are taken from

the Works of the greatest Masters, and may, therefore, be drawn with confidence, and relied on as authorities, in their outline and treatment. In this age of Art, when every well-educated person is either an amateur or connoisseur, it would have been trifling to have exhibited an Elementary Work of the low character of the ordinary Drawing-Books; the Author has, therefore, attempted to attain a character of novelty, and to soar above mediocrity: —on that principle founding his claims to the preference and patronage of the Public.

He has purposely confined his instructions to Drawing only, as practised in outline, in shadow, and in water-colours; and has not treated of other branches of the Art, because the major part of Students require nothing further, because what he has done is the foundation of every other branch, and because other branches, after what is contained herein, are rather consequential and mechanical, than novel or necessary.

With respect to the mode of teaching or studying this Art, little can be added to the practical directions scattered through every part of the letter-press; but if the Author may advise with additional emphasis in this place, he would recommend, that freedom in each set of examples should be followed

by the practice of copying those objects *after nature*. The effort may be difficult at first, but the difficulty will speedily vanish; while the advantages will be solid, and the gratification excessive. Not only will the facility of drawing be improved, and the manner become decided; but the ideas of light and shade will be corrected, and the principles of perspective, established by practice, will be duly felt and ascertained. Let the Tutor and the Student bear in mind, that the means of this study are prints, and examples of Masters, but that its end is accurately to pourtray Nature.

In taking leave of his readers, the Author may, perhaps, without improper egotism, remark, that his is the first arranged and comprehensive work on this Art ever published in England; he calculates, therefore, on the cordial support of Masters in general, and on the liberal sanction and recommendation of his work among the intelligent part of the Public.

If further examples are deemed necessary, he begs leave to recommend the Book of Simple Rural Scenery, by NATTES, and the Book of Animals by CHALONS, the completest, most tasteful, and most economical works within his knowledge.

London, Sept. 4th, 1827.

LIST OF PLATES.

ELEMENTS

OF

THE ART OF DRAWING.

GENERAL DEFINITIONS.

1. The object of the Arts of Drawing is to represent Nature, animated or unanimated, so as to revive the recollection, or preserve the likeness, of any object or scene. This purpose is effected by means of pencils, chalk, crayons, Indian ink, or water colours, on paper, vellum, or ivory.

2. Drawing, in a more general sense, is the art of representing all objects of nature visibly, by lines and colours on a plain surface. It has also the power of expressing, by the same means, conceptions and images of the mind which do not actually exist in nature, and is to be considered as an art displaying, either conjointly or separately, the powers of imagination and imitation: being divided into Invention, Composition, Design, and Colouring.

Observation. Amongst the artists of antiquity, Apelles was the most eminent for the beauty of his drawing. Since the revival of the art, Michael Agnolo appears to have been the most learned draughtsman, Raffaelle the most correct and graceful. The Roman and Florentine Schools excelled all others in this fundamental part of painting. Of the former, Raffaelle, Roman, Polydore, and their

scholars; of the latter, Agnolo, Vinci, and Sarto, have been the most excellent. In the Bolognese school, Annibal Caracci is particularly distinguished. In the French school, Poussin, Le Sœur, and Le Brun. In our own, Mortimer, Barry, and Sir Joshua Reynolds, have been the most celebrated.

3. Invention consists generally in the choice of such subjects as are best calculated to answer some great and interesting end; and particularly in discovering or selecting such as are capable of being most appropriately expressed by painting, and of producing a powerful effect by such means as are within the compass of that art.

4. Composition regards the arrangement of the subject, both as to forms, and to the general effects of light and shade, and colour. It comprehends the general distribution and grouping of the figures, their combinations or contrasts, the choice of attitudes, the disposal of draperies, the situation of the scene itself, as well as the distribution and connection of the various parts of scenery and ornament. Composition in architecture is the due arrangement of the parts of an order or building.

Obs. 1. *To make a good design or picture, the composition should not be overcharged.* A composition is said to be overcharged when the component parts, either by their multiplicity, arrangement, or distribution, destroy the effect of the whole, or do not contribute to the object of the piece. It is not the quantity or number of subjects introduced that renders a composition rich; but, on the contrary, they often destroy the simplicity and truth of the story intended to be related.

Obs. 2. *In composition those figures that particularly relate to the story are called principals, and the less essential ones that complete the groupe, accessories.* In the language of the arts accessories are those objects which are introduced into a design without being indispensably necessary to the elucidation of the subject. In an historical design the figures which act and explain the subject are the principals, and the rest accessories. As for instance: in designing the story of Telemachus relating his adventures to Calypso in the cave, after his

shipwreck on the island of the Goddess; Calypso, Telemachus, and Mentor, are principals; but some Nymphs, introduced to perfect the grouping, are accessories. Fruit, vases, &c. are also proper accessories, which, at the same time, considerably enrich the composition.

Obs. 3. *The artist who aspires above mediocrity, should be careful in the choice of accessories in his composition, as a superabundance, or improper application of them, will infallibly ruin the best composition.* He should use and dispose them in such a manner as not to spoil the effect of the principal groupe, with which they should always concur, and at the same time assist the general effect. The most skilful painters and sculptors of antiquity have avoided accessories in their compositions, which, however, often occasions too great dryness and insipidity; but omitting them altogether is much to be preferred to introducing them improperly; for nothing is more insupportable to the eye of a true judge of perfection in art, than to see designs crowded with accessories which have no connection with the principal object, or where they are only introduced to fill up or conceal the vacuity of the principal object, or the want of genius in the artist. To avoid a poverty of grouping in composition, is of as much consequence as its opposite extreme, and should be as carefully avoided. A just composition includes, of truth and propriety of grouping, correctness of costume, and appropriate action and expression.

Obs. 4. *The principal figures, which decide what is the subject, should have the principal place in the picture, and should be so placed as to engage and strike the eye at the first glance.* This is one of the most important things to be remembered in composing a design, and is one of the most prominent excellencies in the great masters.—Raffaelle particularly observed this;—St. Paul, in his cartoon of that Apostle preaching at Athens, stands decidedly principal; his situation, his attitude, his form, is most prominent. In Reubens' Descent from the Cross, the dead body of Christ is in the principal place, catches the principal light, and is altogether the principal figure.

> "Paint not conspicuous on the foremost plain
> Whate'er is false, impertinent, or vain;
> But, like the Tragic Muse, thy lustre throw
> Where the chief action claims its warmest glow."

Obs. 5. *The principal figures should not be hidden by any of the other figures or accessories, however grouped;* on the contrary, the judicious artist should make all the second rate figures and accessories serve to elucidate the story, and render the principal figure more obviously in sight.

Obs. 6. *The principal groupe should receive the principal light, and the principal figure of that groupe the principal light of that groupe.* By this means, the attention of the spectator is immediately directed to the most important part of the picture, the subject sooner developes itself to his mind, and the subordinate parts arise in succession, and prepossess him more forcibly in favour of the work.

Obs. 7. *In grouping (or in the composition of groupes) let every figure appear to hold a just situation, and without appearance of restraint conform to an agreeable form in that groupe; and if more than one groupe is introduced, let them, as well as the single figures, be different in general form and composition.* A neglect of this precept will occasion a tiresome and blameable monotony, that will be destructive to the best drawing, colouring, and expression, individually painted. In the works of the great Raffaelle this beauty and fault are both perceptible. In the cartoon of Paul preaching at Athens, there is a wonderful contrast of the figures and grouping.

5. DESIGN is the first idea of a large work, drawn roughly, with an intention to be executed and finished. The essential requisites of Design are correctness, taste, elegance, character, expression, and perspective.

Correctness depends on the justness of the proportions, and knowledge of anatomy.

Taste is a certain correctness of manner peculiar to the artist, derived either from nature, masters, or studies, or all of them united, producing elegance.

Character is what is peculiar to each thing, in which there must be diversity, insomuch that every thing has its peculiar character to distinguish it.

Expression is the representation of an object, according to the circumstances it is supposed to be in.

Perspective is the representation of the parts of a paint-

ing, or a figure, according to the situation they are in with regard to the point of sight and to each other.

Obs. 1. Designs are sometimes drawn in crayons, or ink without any shadows. Sometimes etched; that is, the shadows are expressed by sensible outlines, usually drawn across each other with the pen or crayon. Sometimes the shadows are done with the crayon rubbed so as that there do not appear any line: at other times, the grains or strokes of the crayon appear, as not being rubbed: sometimes the design is washed, that is, the shadows are done with a brush in Indian-ink, or some other liquor: and sometimes the design is coloured, that is, colours are laid on much like those intended for the ground work.

Obs. 2. The art of designing is to be acquired chiefly by study and observation, rules being of less avail than in any other branch of art. The principal rules that regard design are, that novices should accustom themselves to copy good originals at first sight; not to use squares in reducing, lest they stint and confine their judgment; to design well from life, before they practise perspective; to learn to adjust the size of their figures to the visual angle, and the distance of the eye from the model or object; to mark out all the parts of their design before they begin to shade; to make their contours in great pieces, without taking notice of the little muscles, and other breaks; to make themselves masters of the rules of perspective; to observe the perpendicular, parallel, and distance, of every stroke; to compare and oppose the parts that meet and traverse the perpendicular, so as to form a kind of square in the mind, which is the great, and almost the only, rule of designing justly; to have regard not only to the model, but to the parts already designed, there being no such thing as designing with exactness, but by comparing and proportioning every part to the first object.

6. Designs are denominated Historical, Architectural, Landscape, Marine, Portrait, Animal, Still-life, Flower, according to their respective subjects.

Historical Painting is that kind in which the figures are made to concur in representing some action described in history.

Obs. Although this is the strict definition of the term, yet custom has given greater latitude to the phrase, as it now comprises, in the language of the arts, subjects taken from mythology, allegory, battles, and sometimes even portraits. Historical design is, in the language of the elegant author of the Elements of Art,

> " Big with the moral of each maddening age,
> War's ruffian power, and revolution's rage;
> Grave history presents her ample stores,
> And man's fierce passions while she paints deplores."
>
> SHEE'S ELEMENTS OF ART, Canto 4. v. 195.

ARCHITECTURAL DRAWINGS are representations of buildings, drawn either geometrically or perspectively, according to the rules of architecture.

Obs. This is a very important study, and is followed as a profession, the professors of which are termed Architects. But to be a painter or draughtsman of architectural views already executed, does not require so much study. An insight into the elements of the orders, their arrangement, and a knowledge of perspective, are sufficient. Architecture is also an important accessory to the historical and portrait painter, and should be attentively studied. The blunders in architecture committed by modern artists is the less excusable, because it can be so easily remedied, and is such a palpable deficiency in any artist. Mr. Shee describes it as " the stately art," which

> " Supplies of ornament and use she brings,
> Proud fanes for gods, and palaces for kings,
> To noblest acts a suited scene provides,
> And o'er the back-ground's gorgeous store presides."
>
> ELEMENTS OF ART, Canto 2. v. 91.

LANDSCAPE DRAWING, or Landscapæ, as it is generally called, is that class of drawings, paintings, or engravings, which represent some view of the country.

Obs. This is a branch of art the most delightful in its effects and agreeable in its study. The great variety of beauties that it contains, render it among the most attractive of the arts of design. It calls in

all the accidents of nature, and even of art, to its composition, from the solitude and horror of the rocky desert, the sublimity of the forest, the calm beauty of the flowery meadow, the stillness of the limpid stream, to the destructive tempest. In short, every mild or strong effect that nature is capable of producing.

" The *landscape* artist, gay and deftly moves
Through glade, glen, valley, woodland, green alcoves."
TRESHAM'S SEA-SICK MINSTREL, Canto 6. v. 89.

MARINE DRAWINGS are those which take into their representation, not only views of the sea, but shipping, seaports, naval battles, and similar subjects.

Obs. This is a branch of art connected with the last, as being derived from the same source, an attentive study of nature; but it requires, in addition, a knowledge of the naval sciences, naval architecture, and perspective. Few men would, like Vernet, the most distinguished marine painter of the French school, venture to sea in the most tempestuous weather, when, made fast to the shrouds, he observed attentively, and treasured up incidents for the magical pictures which he has left.

" What daring artist in a storm
Grappled with terror, imitate Vernet,
Or Wilson like, secure, sublimely flies
Through troubled waters and ill-omen'd skies."
SEA-SICK MINSTREL, Canto 5. v. 47.

PORTRAIT PAINTING is that department of art which represents, in any manner, the figure and exact resemblance of any particular person.

Obs. This department of the fine arts is, next to its critical design, (which, to a degree, assimilates with it) one of the most useful and most interesting. It maintains among the arts a most distinguished rank, when performed with ability; but is, when ill-done, or even in mediocrity, unworthy of much estimation. The essential qualities to form a good portrait are, correct drawing, an exact and perfect

representation of the person represented, natural colouring, an easy unaffected air, attitude, and character.

ANIMAL PAINTING, unconnected with other divisions of the arts, is the representation of the portraits of animals, either in action or at rest.

Obs. To paint or design animals well, is a respectable province in art, and requires much study and perseverance. They should always be represented naturally; their action should be characteristic; and their anatomy well understood.

STILL-LIFE is the representation of inanimate substances, when unconnected with living nature and historical facts.

Obs. This department of art, although it has its merits, is one of the lowest. It embraces the correct copying of furniture, glasses, musical instruments, fruit, vegetables, &c. when mixed together on a table; but if each kind is taken separately, they are then classed under fruit, flowers, &c. The Dutch masters have long been celebrated as excelling in this tedious and laborious branch of art, which requires but little invention, and less genius. Imitation of such dull *fac-similes* should be avoided by students of real genius; "minutiæ mongers,"

> "Who spend on petty cares their puny powers,
> And live to polish pores, and hairs, and flowers."
>
> ELEMENTS OF ART, Canto 5. v. 281.

or who, like

> "Batavians paint with microscopic truth,
> Foul linen, squalling brats, and feats uncouth;
> Their native nature, native filth embrace,
> And chastely shun that foreign harlot—GRACE."
>
> SEA-SICK MINSTREL, Canto 6. v. 75.

FLOWER PAINTING is the representation of flowers, arranged in some beautiful order, and composed only of flowers, with, perhaps, the addition of a vase or basket to hold them.

Obs. Flower painting, when executed with botanical correctness, is an enticing and beautiful line of art. When flowers are used as accessories to history or portrait, a much less careful finishing and

arrangement are necessary than when they make a distinct picture of themselves. In this case, they should be careful portraits of the flowers, and a certain knowledge of botany is as indispensably necessary to excel in flower painting as anatomy in portrait or history.

7. Colouring or Shadowing regards, first, the infinite variety of hues, with which nature distinguishes her forms, agreeably to the degree and mixture of the rays of light which their surfaces reflect; and, secondly, the distribution, apposition, and accompaniment, of various hues or tints, so as to produce the effect most pleasing to the sight; a circumstance in which nature does not always delight. It embraces, also, the light and shade of objects, as far as by the diminution or increase of these the harmony of tints before-mentioned can be effected; but that mixed effect of colour and of light and shade, which is denominated chiaro-scuro, is more justly regarded as a branch of composition.

Obs. The perfection of an artist depends, therefore, on Invention, Composition, Design, and Colouring, conjointly; yet it is by the last of these only that he can establish a special idea of his art, since it is by this that he gives effect to the former, whether he depend on light and shade, or endeavour to imitate the tints of nature. This subject will be resumed at length in the subsequent part of the work.

IMPLEMENTS USED IN DRAWING.

8. The Implements necessary for drawing are, a drawing board, a ruler, compasses, charcoal, black-lead pencils, pen-knife, porte-crayons, black, white, and red chalk, crayons, Indian ink, crow-quill pens, camels'-hair pencils, boxes of colours, paper of several sorts, and porte-folios.

9. Drawing Boards are used to fix the paper so that it may not shift, and also to strain it, to prevent the colours, when laid wet on the paper, from causing it to swell, so as to become uneven. The simplest sort is made of a deal-board, framed

square, with a strong piece across each end, to prevent warping. Upon this the paper may be fixed with pins, wafers, or sealing-wax, or it may be strained with paste or glue. The best kind of drawing boards, however, are made with a frame and moveable pannel, upon which the paper is simply put wet, and then forced into the frame, where it is confined by wedges at the back. This strains without the trouble of pasting, so that you may dry it at the fire; and it also looks much neater. Such drawing boards may be bought at most colour shops.

10. Parallel Rulers are used for drawing parallel lines; they are made of two pieces of ebony, fastened together by brass bars, so as always to open parallel to each other.

11. Tee Squares are rulers made in the form of a T, which are used with drawing boards; the short end, called the stock, being applied to the edge of the board, so as to slide forwards and backwards, while the long part, called the blade, is used for drawing lines by. These are more convenient than parallel rulers, when a drawing board is used, as by them you rule lines at right angles to each other at once, without using the compasses.

12. Drawing Compasses are instruments of brass and steel, for dividing lines, and laying down measures from scales, &c. They are generally sold in *cases*, containing also a steel pen, for drawing lines cleaner than can be done by a common pen, and are very useful where neatness is required; and points with a black-lead pencil, for putting into the compass, when circles are to be described. These cases also contain scales of equal parts, and protracters for laying down angles.

13. Black-lead Pencils are made of a mineral substance, called plumbago, or black-lead, sawed into slips, and fitted into sticks of cedar. They are either hard or soft; the best are without any grit, not too soft, and cut easily without breaking. The inferior kind is made by mixing the dust of black-lead with gum or glue, and forming a composition; these are gritty and brittle, and do not answer so well.

Obs. Accustom yourself to hold your pencil farther from the point than you do in writing, which will give you a better command of it, and contribute to render your strokes more free and bold. The use of your pencil is to draw the first sketches or outlines of your piece; as any stroke or line that is amiss may be more easily rubbed out; and when you have made your sketch as correct as you can with the pencil, you may then carefully mark the best outline you have got with the crow-quill pen and Indian ink.

14. INDIAN RUBBER has the useful property of erasing lines drawn with black-lead, and is brought from South America, in the form of small bottles, which, for use, should be cut into slips.

Obs. This very curious substance is originally the juice of a tree that grows abundantly in Surinam, and is like milk when exuded from the tree, but soon becomes solid. The natives form balls of clay, which they smear over with this milk, and when this coating is dry, they apply another, and so on, till it is of the required thickness; they then moisten the clay and wash it out. These bottles are used by the natives for carrying water, or other liquors. It is a production common to the East Indies also, whence it is imported in various forms, more convenient for use than in the bottles above-mentioned.

15. INDIAN INK is a very useful substance, brought from China, where it is used for ordinary writing, which the Chinese perform with a brush instead of a pen. It is a solid substance, of a brownish black colour, and is conjectured to be made of the gall of a species of cuttle-fish. When ground up with water upon a clean tile, shell, or earthenware plate, it may be made either lighter or darker, as required, by adding to it more or less water. The best is always stamped with Chinese characters, breaks with a glossy fracture, and feels smooth, and not gritty, when rubbed against the teeth. An inferior kind, made in this country, may easily be known by its grittiness.

Obs. Having completed the outlines, Indian ink is used for shadowing, as it may be diluted with water, so as to be of any required

darkness, and may be softened or fined off, where the objects require it, with water only and a clean hair-pencil.

16. Hair Pencils are made of camels'-hair, put into a goose or swan's quill. Moisten them a little, and if they come to a point without splitting, they are good; if not, they are not fit for drawing. The brushes used by the Chinese, made of a white hair fitted up in reeds, are very excellent for drawing, as they are more elastic. They are not sold in common, but may sometimes be met with.

17. Charcoal is used for slightly sketching the outlines of figures, in order to get the proportions previous to making a drawing in chalk. The best charcoal for this purpose is that of the willow; it is cut into slips, and the strokes made with it may easily be rubbed out with a feather of goose's or duck's wing.

18. Porte Crayons are tubes made of brass or steel, and calculated to hold chalks, pencils, crayons, charcoal, &c.

19. Black Chalk is a fossil substance, resembling slaty coal, and is cut into slips for drawing. It is generally used in a porte crayon. It is much employed for drawing figures, and is the best substance for the purpose of making drawings from plaister, or after the life. It is more gritty than black-lead, but is of a deeper black, and has not the glossiness of the former. It is of two kinds, French and Italian; the former is soft, the latter hard.

Obs. For mellowing and softening the shadows into each other, when black chalk is used, stumps are necessary. They are pieces of soft shamoy leather, or blue paper, rolled up quite tight, and cut to a point.

20. White Chalk is used, together with black, for laying on the lights. This is different from common chalk, being much harder, and tobacco-pipe clay will do very well instead of it.

21. Red Chalk is a fossil substance of a red ochre co-

lour, sometimes used for drawing, but not so much as formerly, the black being preferred to it; but the red, being cheaper, does very well for some purposes.

Obs. Red-lead, and red or black chalk, are used in the same manner as black-lead. White chalk and tobacco-pipe clay are used in heightening, or giving strong lights, and in drawing on coloured paper. Pastils, or crayons, are any colours mixed with tobacco-pipe clay, which, while soft and in the consistency of a paste, is rolled up in pieces, about the thickness of a quill, and two or three inches in length, and then dried: they are generally used on coloured paper; and the colours are rubbed and wrought one into another in such a manner that no strokes appear, but the whole looks as if it was done with a brush.

22. Drawing Paper, made without any wire-marks, called wove-paper, is generally used. It is made of various sizes and thickness, and may be had of every stationer. Middle-Tint Paper is paper of a brownish or of a grey colour, which is used for drawing upon with black and white chalk.

23. Crow Pens, or Reed Pens, are used for fixing the outline with ink, after it has been determined by the pencil.

GENERAL DIRECTIONS.

24. Having provided yourself with the above-mentioned necessary materials, begin by drawing upright lines, and simple geometrical figures, both straight and curved, either with the pencil or chalk, holding them a greater distance from the point than the pen in writing, to give freedom and command to the hand. After being able, from some practice, to draw upright lines, squares, polygons, ovals, &c. without rule or compass, proceed to the elementary parts of the human head; a few examples of which are given in the plates.

Obs. The circle is of use in the several orbicular forms, as the sun, moon, globes, &c. The oval, in giving a just proportion to the face

or mouth ; and the square confines any picture you are to copy. The triangle is of use in drawing a side or half-face ; angles, and arches, in perspective ; and the polygon in ground-planes, fortifications, &c. The cone, in spires, steeples, tops of towers, &c.

25. Having placed whatever you mean to copy before you, proceed to draw it slightly with a pencil or chalk. Then look closely into it, and proceed to mend those parts that are deficient, correcting it by degrees till you have brought it to the highest degree of perfection.

26. Before you begin, view the original with attention ; divide it in your mind into its several parts ; observe its length, its breadth, and the similitude of each part ; consider their proportion to each other and to the whole ; the distances from one part to the other, and the parts that lie opposite to each other.

27. Whatever copies or examples you draw from, reduce them to other proportions, either larger or smaller, till by repeated trials you acquire correctness of copying.

Obs. It is better to depend on the eye than on *the mode of reducing by corresponding squares,* except when great accuracy is required.

28. Correctness of drawing should be attained before you attempt either colouring or painting. If this is not acquired, no perfection can be attained. The first grand requisite for an artist is *drawing* ; the second, *drawing ;* and the third, *drawing.* Mr. Shee impresses this subject very forcibly :—

> " Ply then, the bright port-crayon till you find
> Correctness with facility combin'd :
> Till the firm outline flows at your command,
> And forms become familiar to your hand."
>
> ELEMENTS OF ART, Canto I. v. 317.

29. Outlines must be drawn in a gliding manner, large and smooth, which will give them the resemblance of life and motion. *Correctness of outline* is the first point to be attained,

and can only be the result of patient diligence, long practice, and varying the size of your copies.

Obs. Here it is proper to admonish the student never to be in a hurry; but to make himself perfectly master of one figure before he proceeds to another, and the advantage of this will appear as he proceeds. Two other observations may also be added:—1. That he accustom himself to draw all his figures very large, which is the only way of acquiring a free, bold manner of designing. 2. That he practise drawing till he has gained a tolerable command of his pencil, before he attempts to shadow.

30. In drawing figures in Indian ink, the use of the pencil is to draw the first sketches or outlines; as any stroke or line that is amiss, may in this be more easily rubbed out than in any other material; and when you have made your sketch as correct as you can with the pencil, you may then draw carefully the best outline you have got, with your crow-quill pen and ink. After using the ink, you may rub out the pencil lines.

31. The outlines next the light should be drawn more faint; and when you have drawn one feature, it should be a direction for you, in some measure, to draw another, by observing with your eye the distance from that to the next feature, making a small mark at the place with your pencil; then draw it, and so on to the next, till you have drawn the whole subject.

32. Observe the middle of the picture you would copy, and touch it upon the paper with your pencil; afterwards observe the more conspicuous and prominent figures, if there are more than one, which touch lightly in their proper places. Observe also the distance of one limb, joint, or muscle, from another, and the same in all other accidents of a figure; as the length, breadth, turnings, &c.

33. Having drawn the outlines true with a pencil, you are to proceed to trace the true lines again with a pen and Indian ink, &c. drawing them with exactness, and imitating all the

touchings and waivings, with their exact distances one from another, and their crossings, turnings, and windings, with boldness and freedom.

34. Having acquired some facility in handling the port-crayon or pencil, in copying other drawings, you may proceed to copy from a *plaister cast*, or other model, set before you, of the size of nature or not, to use yourself to correctness of eye. To do this the figure should be set in an advantageous light, which should proceed from the left-hand side, the draughtsman should sit opposite to it at some distance, at least more than twice the height of the figure he copies, with the light to his left hand.

35. Begin the draught on your own left side, as is customary in writing, and, by so doing, you will always have the part that is done before your eyes, and the rest will follow with ease; whereas, if you begin on the right side, your hand and arm will cover what you do first.

OF LIGHT AND SHADE.

36. The best rule for *the correct distribution of Lights and Shades* is, to consider from what point, and in what direction, the light falls upon the objects, and to let all the lights and shades be placed according to that direction throughout the whole. It is the skilful management of light and shade that gives the appearance of substance, roundness, and distance, and which raises the subject from the paper.

Obs. Draw a circle on a piece of paper; fill it up with any even colour, and it will appear to be a surface with a round circumference; but by shadowing it stronger in the middle, and causing the colour gradually to weaken towards the circumference, it will receive a convex appearance like that of a ball or globe: wherever the vivacity of colour is strongest, that part of the object catches the sight first, and appears nearest to it; whereas its weakness seems to fly farther from

the sight. In rounding the parts of any object, the extremities in turning must lose themselves insensibly and confusedly, without precipitating the light on a sudden into the shadows, or shadows into the light, but the passage of the one into the other must be imperceptible; or, by degrees, of light into shadow, and shadow into light.

37. Objects that are drawn light, must have a sufficient breadth of shadow to sustain them; and dark bodies must have a sudden light behind, to detach them from the ground, or from those objects that are placed behind them; otherwise they will appear confusedly, as sticking upon each other; whereas the opposition of shade to a light object, and of light to a dark one, gives a projection, and separates them from other bodies.

38. There should be a balance preserved between the lights and shadows: a broad light ought not to be introduced into a draught without a large shadow. The nearer any object is to the eye, it is seen so much the stronger and plainer: the sight is weakened by distances, and the more remote any object is, it is seen in a more imperfect manner. Therefore, those objects which are placed foremost ought to be more finished than those that are cast behind; and objects should have a dominion over each other, so that one object by its high finish should seem to cause others to retire. Titian used to say, that he knew no better rule for the distribution of lights and shadows, than the observations to be drawn from a bunch of grapes.

39. That part of the object, whether in naked figures, drapery, or buildings, that stands farthest out, must be made the lightest. Satins and silks, and all other shining stuffs, have glaring reflections, exceedingly bright where the light falls strongest. So in armour, brass pots, or any other glittering metal, a sudden brightness in the middle or centre of the light, distinguishes their shining nature.—*See the Plates.*

40. It is not sufficient that remote subjects be coloured

more faintly; but, according to their distance, the parts must appear more or less distinct. Pure white, unless supported by black, will seem to fly off to the remotest parts. Pure black brings the objects nearer to the sight, and must be placed in masses in the foreground. A strong light requires a strong shade; a fainter light a fainter shade; and an equal balance must be preserved throughout the piece, between the lights and shades. Parts which are to appear round require but one stroke in shading; and parts which are to appear steep or hollow, require two strokes across each other, or sometimes three. Care should also be taken to make the outlines faint and small in such parts as receive the light; but where the shadows fall, the outline should be strong and bold.

41. If the objects are in the fields, or open air, or obscured by clouds, you must then introduce a universal light, and the shades must be faint. When the sun is conspicuous, and shines in full lustre, the light must be very strong and bold, and the shadows very dark.

42. A small light occasions the shadows on the dark side to be large, and their extremities to be very bold. On the other hand, a broad light makes the shadows on the darker side to be more distinct and more soft.

43. If the light falls sideways on the picture, the other side, which is the farthest from the light, must be made the darkest. That part of the body must be made lightest which has the light most opposite to it; if the light be placed above the head, then the top of the head must be made lightest; the shoulders must receive the next degree of light; &c.

44. Shadowing is performed with the hair-pencil, in which great taste and judgment is required. The light comes in, if *natural*, either from the right hand or left. Whenever the light appears in the middle of a picture, and glares more than ordinary, it is caused by a candle, or other luminous body, and is called *artificial* light. Two equal lights must never be made in the same picture; and the strongest light should fall upon

the middle of the piece, where the principal figure ought to stand, diminishing the effect gradually towards the extremities.

OF THE HUMAN FIGURE.

45. Drawing the Human Figure has always been considered as the most important branch of art. The study of the human figure includes all the finest principles; and when the eye of the student has been accustomed to copy faithfully all the minute circumstances which constitute the character of man, and to attend to the innumerable beauties and graceful forms which he presents, it will be better qualified to pursue every other branch of the fine arts.

46. In drawing the human figure, it is necessary to begin with each part separately, and, after sufficient practice in that, to proceed to put them together. The head being the most important part of the human body, it should be studied first. For this purpose, the student should copy the best drawings he can procure of the nose, eye, mouth, and ear, separately, and on a large scale; and of these a front view, profile or side view, oblique view, &c.—*See the Plates.*

Obs. The readiest materials for drawing these, as well as all other parts of the figure, are black-lead, or black chalk; the former to be used upon white paper, and the latter upon middle-tint paper. The false lines of the black-lead may be removed by the Indian rubber: but the student must remember to be as sparing as possible of this, as it is more improving to endeavour to draw every thing correct and decided at once. The shadows may be laid on by drawing parallel curve lines, according to the situation of the part, crossing them occasionally, and softening them in with more delicate lines. Sometimes the shadows are rubbed in, or their edges are softened, with a stump, which is a very expeditious way, and produces a fine effect; but it should be used with discretion, as it is better to execute

the shadows in a clear and regular manner by soft lines. Care should be taken not to make the lines harsh and hard, like those of an engraving; they should be softer and more mellow.

47. In drawing the human figure, whether from nature or otherwise, observe the following order:—

a. Mark out the extent on the paper that you propose the figure to occupy.

b. Sketch in the outline of the head, according to the regular proportions.

c. Proceed with the shoulders, trunk, and arms.

d. Draw first the leg on which the body principally stands, and then the other; and finish as before directed.

48. In drawing after a naked body, all the muscles are not to be expressed as in anatomical figures. In drawing young persons, the muscles must not appear so hard as in elder and full-grown persons; the same thing is to be observed as to fat and fleshy persons, and such as are very delicate and beautiful; and in women scarcely any muscles are to be expressed.

49. The motion of the body must be considered in drawing the muscles; as in the rising and falling of the arms, the muscles of the breast appear either more or less; the hips do the like, as they are bent outward or inward; and it is the same in the shoulders, sides, and neck, according to the several actions of the body.

50. All the parts of a human figure are composed of curved surfaces; no straight lines are ever admissible, but every line should have a graceful turn; and it is this circumstance particularly that occasions the study of the figure to give so much freedom in drawing.

51. Care should be taken that no lines cross each other at right angles, which gives a disagreeable appearance; neither should the crossing be too oblique, as then they appear confused; a proper medium will be acquired by the study of good drawings or prints; in general, however, crossing should be avoided as much as possible.

Obs. In learning to draw, it is of more importance than is generally supposed, to copy from the finest works only. The most prejudicial quality of a model is mediocrity. The bad strike and disgust; but those that are not good, nor absolutely bad, deceive us, by offering a dangerous facility. Having copied frequently the parts of a face, proceed next to the entire head, drawing first a front view, then a profile, a three-quarter figure, and so on, varying it in every possible direction, till thoroughly acquainted with the appearance of all the principal lines in every situation. The student should then accompany his lessons by making observations on good casts and living models; but more particularly the former, as individual nature is seldom fine, and there is danger in copying what is bad, and acquiring false ideas of beauty. By these exercises he will have acquired some facility in handling his pencil, and he will be thus prepared for the study of the whole figure. But before he can proceed to this with advantage, we would recommend to him the study of anatomy. But it is to be remarked, that it is not necessary for the designer to study anatomy as a surgeon, nor to make himself acquainted with all the nerves, veins, &c. It is sufficient to study the bones, and the muscles which cover them, and of these he should more particularly make himself familiar with those muscles which most frequently appear and come into action. For this purpose, he should procure plaster casts of the anatomy of the human body, and consult treatises written upon the subject; and if he has opportunity, it may be proper afterwards to attend dissections and lectures on anatomy. Until the student has imbibed a proper relish for beautiful proportions, and been well-grounded in their principles, he should not proceed to draw from living models. In drawing from plaster casts, a good deal depends upon choosing a proper view, and placing the model properly with regard to the light, which should come in obliquely from above, as it generally does in the day-time. If a candle is used, it should be so high as to cast the light downwards upon the model. The light should only come from one part, as cross-lights distract and spoil the shadows.

52. *In measuring of the several parts of the human figure,* the moderns ordinarily divide it into ten faces; that is, from

the crown of the head to the sole of the foot, in the manner following; all of which should be committed to memory :—

From the crown of the head to the forehead, is the third-part of the face.

The face begins at the lowest hairs which are upon the forehead, and ends at the bottom of the chin.

The face is divided into three proportional parts : the first contains the forehead, the second the nose, and the third the mouth and chin.

From the chin to the pit between the collar-bones are two lengths of the nose.

From the pit betwixt the collar-bones to the bottom of the breast, one face.

From the bottom of the breast to the navel, one face.

From the navel to the genitals, one face.

From the genitals to the upper part of the knee, two faces.

The knee contains half a face.

From the lower part of the knee to the ankle, two faces.

From the ankle to the sole of the foot, half a face.

A man, when his arms are stretched out, is, from the longest finger of his right-hand to the longest of his left, as broad as he is long.

From one side of his breast to the other, two faces.

The bone of the arm, called humerus, is the length of two faces, from the shoulder to the elbow.

From the end of the elbow to the root of the little finger, the bone called cubitus, with part of the hand, contain two faces.

From the box of the shoulder-blade to the pit betwixt the collar-bones, one face.

The sole of the foot is the sixth-part of the figure.

The thumb contains a nose.

The inside of the arm, from the place where the muscle disappears, which makes the breast, called the pectoral muscle, to the middle of the arm, four noses.

From the middle of the arm to the beginning of the hand, five noses.

The utmost parts of the teats, and the pit betwixt the collar-bones of a woman, make an equilateral triangle.

The hands are twice as long as they are broad, and each of their parts has its length, breadth, and thickness.

The length of the foot is a sixth-part of the height.

The length of the face and hands ought to be exactly equal, and it makes just the tenth-part of the height.

53. The rules in drawing children are as follow:—

A child contains five measures of the head.

From the top of the head to the privities, three heads, and in the thighs and legs, two more.

The breadth between the two shoulders, is the length of a head and a half.

The breadth of the body above the navel, the length of one head.

The small of the leg, and the brawn of the arm, are of the thickness of the neck.

Obs. The following Table exhibits the proportions of the parts of the famous Apollo Belvidere and Venus di Medici. Supposing the figures to stand upright, and duly poised on both legs, the whole heighth of the former is divided into thirty-one and a half parts, or fourths, being seven heads, three-fourths, and six-twelfths; and that of the latter, into thirty-one parts, being seven heads and three parts.

LENGTH OF THE HEAD AND TRUNK OF THE BODY.

	Apollo.			*Venus.*		
	H.	F.	T.	H.	F.	T.
From the top of the head to the bottom of the chin, four-fourths, or	1	0	0	1	0	0
the bottom of the chin to the top of the sternum, or breast-bone	0	1	7	0	1	8
the top of the sternum to the pit of the stomach	0	3	10	0	3	6
the pit of the stomach to the navel . .	0	2	10	0	2	7
the navel to the pubis	0	3	6	0	3	9
Length of the head and trunk of the body . .	3	3	9	3	3	6

Length of the Lower Extremities.

	H.	F.	T.	H.	F.	T.
From the pubis to the small of the thigh, above the patella, or knee pan . .	1	2	6	1	2	3
the small of the thigh to the joint, or middle of the knee	0	1	9	0	1	6
the joint of the knee to the small of the leg above the ankle	1	1	9	1	2	0
the top to the bottom of the ankle . .	0	1	0	0	1	0
the bottom of the ankle to the bottom of the heel	0	0	9	0	0	9
Length of the lower extremities . . .	3	5	9	3	3	6
Length of the head and trunk, as above .	3	3	9	3	3	6
Total length of the figures . .	7	3	6	7	3	0

Length of the Arm.

From the top of the shoulder to the elbow .	1	2	3	1	2	3
the elbow to the hand	1	1	2	1	0	6
the joint of the hand to the root of the middle finger	0	1	8	0	1	6
the root to the top of the middle finger	0	1	10	0	1	7
Length of the upper extremities .	3	2	11	3	1	10

Side View.

Length from the top of the head to the shoulder.	1	1	8	1	1	6
the top of the shoulder to the loins above the hip . .	1	3	3	1	1	7
the loins to the lower part of the hip	1	0	2	1	2	1
the hip to the side of the knee, opposite to the top of the patella	1	2	0	1	0	11
the side of the knee to the bottom of the heel . .	2	0	5	2	0	11
Length of the figure	7	3	6	7	3	0

Other antique statutes differ a little from these proportions, the Laoçoon measuring 7h. 2f. 3t.; the Hercules, 7h. 3f. 7t.; the Pyramus, 7h. 2f.; the Antinous, 7h. 2f.; and the Shepherdess, 7h. 3f. 6t. But all their proportions are agreeable to the characters they

represent. The most remarkable differences of the symmetry of a man and a woman to be observed from the table are: First, the shoulders of a man are broader, measuring two heads; and the haunches narrower, measuring 1h. 1f. 5t. whereas the shoulders of a woman measure only 1h. 3f. 8t. and the haunches measure 1h. 2f. 3t. The sternum, or breast-bone, of a man is longer, measuring 3f. 8t. and the sternum of the woman only 3f. 3t. On the contrary, the pelvis of a man is less, measuring from the top to the bottom only 4f. whereas the pelvis of a woman measures from the top to the bottom 4f. 3t.

53. Mark the exact extent which you propose to give to the figure, both in height and breadth; next, divide agreeable to the above general proportions; and having thus ascertained the place where each part is to be drawn, sketch the head, then the shoulders, in their exact breadth; then the trunk of the body, beginning with the arm-pits (leaving the arms till afterwards), and so down to the hips on both sides, being sure to observe the exact breadth of the waist. When you have done this, draw that leg upon which the body stands, and afterwards the other; then draw the arms, and last of all the hands.

54. Endeavour to form all the parts of the figure with truth, and in just proportion, not one arm or one leg bigger than the other; not broad shoulders with a slender waist, nor raw and bony arms with thick gouty legs; but let there be a regular harmony among the members, and an agreeable symmetry throughout the whole figure.

55. As the essence of drawing consists in making at first a good sketch, you must, in this particular, be very careful and accurate; finish no part, till you have seen whether the whole draught be good; and when you have altered that to your taste, you may then finish one part after another as precisely as you can. In drawing the eyes, ears, legs, arms, hands, feet, &c., great care, study, and accuracy are requisite.

56. In drawing a labouring man, you must represent him with strong limbs and raised muscles, swelling and standing out, especially in bearing burdens, drawing weights, leaping, running, combating, or such violent exercises.

57. The actions and postures of the hand are so many and various, that no rules can be given for drawing them that will universally hold good; and as the hands and feet are difficult members to draw, it is necessary to bestow due time and pains about them, carefully imitating their various postures and actions, so as not only to avoid deformity and imperfection, but to give them life and spirit.

58. It is usual to divide the head into four equal parts. 1. From the crown of the head to the top of the forehead. 2. From the top of the forehead to the eye-brows. 3. From the eye-brows to the bottom of the nose. 4. From thence to the bottom of the chin. But this proportion is not constant; those features in different men being often very different in length and shape. In a well-proportioned face, however, these proportions are nearly correct.

59. In forming a perfect face, the first business is to draw an oval, or rather the form of an egg; down the middle of which, draw a perpendicular line, and through the centre, or middle of this line, draw a diameter.—On these lines all the *features* of the *face* are to be placed as follows:—

Divide the perpendicular line into four equal parts: the first is appropriated to the hair; the second extends from the top of the forehead to the top of the nose; the third extends from thence to the bottom of the nose; and the fourth includes the lips and chin.

60. The diameter line, or the breadth of the face, is always supposed to be the length of five eyes; you must, therefore, divide it into five equal parts, and place the eyes upon it, so as to leave exactly the length of one eye betwixt them. This is to be understood only of a full front face; for if it turn to either side, then the distances are to be lessened on that

side which turns off, more or less, in proportion to its inclination.

61. The top of the ear is to rise level with the eye-brows, at the end of the diameter line; and the bottom of it must be level with the bottom of the nose. The nostrils ought not to come out farther than the corner of the eye in any face; and the middle of the mouth must always be placed upon the perpendicular line.

62. If the face be fat, the cheeks will seem to swell; if lean, the jaw-bones will stick out, and the cheeks fall in; but if it be neither too fat nor too lean, it will be nearly round. Touch the surface slightly, where the eyes, nose, mouth, and chin should stand; then begin to draw them exactly, and so proceed till you have finished the face; after which draw the hair, its inflections and shadows.

63. To draw the whole of the human figure in length, first sketch the head; then draw a perpendicular line from the bottom of the head seven times its length, the length of the head being nearly one-eighth part of the length of the figure. The best proportioned figures of the ancients are seven heads and three-fourths in height. If, therefore, the figure stands upright, draw a perpendicular line from the top of the head to the heel, which must be divided into two equal parts, the bottom of the abdomen being exactly the centre. Divide the lower part into two equal parts again, the middle of which is the middle of the knee.

64. For the upper part of a figure, take with your compasses the length of the face, which is three parts in four of the length of the head; from the throat-pit to the pit of the stomach is one face, from thence to the navel is another, and from thence to the lower rim of the belly is a third. The line must then be divided into seven equal parts. At the end of the first division place the breasts; at the second, the navel; at the third, the privities; at the fourth, the middle of the thigh; at the fifth, the lower part of the knee; at the sixth

the lower part of the calf; and at the seventh, the bottom of the heel, the heel of the bearing leg being always exactly under the pit of the throat.

Obs. Let the learner remember, in whatever he intends to draw, first to *sketch* its several parts, measuring the distances and proportions between each with his finger or pencil, without using the compasses, and then judge of them by the eye, a practice which, by degrees, will teach him to judge of truth and proportion, and will become his best and principal guide.

65. If one side of the body bend in, the other must stand out; if the back bend in, the belly must stick out; if the knee bend out, the ham must fall in; and so of any other part of the body, If a figure is standing, the foot must be placed in a right line, or perpendicular to the trunk or bulk of the body, where the centre of gravity is supposed to fall. The centre is determined by the heel; or, if the figure is on tiptoe, then the ball of the great toe is the centre. The muscles of the leg which supports the body ought to be swelled, and their tendons drawn more to an extension than those of the other leg.

Obs. Suppose Hercules, with a club, striking at any thing before him towards the left side: then let his right leg be placed so as to receive the whole weight of the body, and the left loosely touch the ground with its toes. Here the external muscles of the right leg ought to be expressed very strong; but those of the left scarcely appearing. The foot being extended, the muscles which compose the calf of the leg are in action, and appear very strong; though it is not meant that *all* the muscles of the right leg, which supports the weight of the body, should be expressed very strong. If either of the *mastoid* muscles act, the head is turned to the contrary side, and the muscle which performs that action appears very plain under the skin. If the arms are lifted up, the *deltoid* muscles, placed on the shoulders, which perform that action, swell, and make the extremities of the spines of the shoulder-blades, called the tops of the shoulders, appear indented or hollow. The shoulder-blades following the elevation of the arms, their bases inclining at that time obliquely downward. If the arms are drawn down, put forwards, or pulled backwards, the

shoulder-blades necessarily vary their positions accordingly. When the cubit, or fore-arm, is bent, the *biceps* has its belly very much raised. The same happens in the *triceps*, when the arm is extended. If the thigh is extended, as when the whole weight of the body rests on that side, the *glutæus* or buttock muscle makes a very different appearance from what it offers at another time; but if the thigh be drawn backwards, that muscle appears still more and more swelled. When the whole leg is drawn upwards and forwards, and at the same time the foot is inclined inwards, the upper part of the *sartorius* muscle appears to rise very strong; in other positions of the thigh, that muscle makes a furrowing appearance in its whole progress. If a man is upon tiptoe, the extending muscles of the leg placed on the fore part of the thigh, and those of the foot that compose the calf of the leg, appear very strong, and the long *peronæus* makes a considerable indentation or furrowing at that time, in its progress on the outside of the leg.—*See the subsequent Pages.*

66. In drawing after the life, the greatest perfection of a *Portrait* is extreme likeness. The resemblance of men to one another is seldom or ever so complete, but that some particular turn or view of the face will indicate a difference; and it is the business of the artist accurately to discriminate, and nicely appropriate, those *peculiar* features, lines, and turns of the face, the representation of which will effectually convey the distinct and special idea of the very person whose portrait is to be drawn, and no other.

67. The resemblance, as well as every other excellence, of a Portrait, depends on the FEATURES, EXPRESSION, and AIR.

> "Man's changeful race, the sport of chance and time,
> Varies no less in aspect than in clime;
> Mark well the difference, and let each be seen,
> Of various age, complexion, air, and mien."
>
> MASON'S FRESNOY.

68. The FEATURES require to be carefully examined and studied, by inspection in many different views, so that at the

moment when the painter puts his pencil to the canvas, he may be possessed, not only of the apparent form of each particular feature in the view in which he represents it, but of its relative and characteristic form also, the full expression of which is not discernible in every view. Each particular feature should appear so distinctly shaped, that an exact model of the real head may be formed from the picture, if requisite; and they must, at the same time, be so blended in the general mass of the face, that no one shall obtrude itself on the eye beyond the rest. The peculiar mode of touch, or execution, whereby each feature is best discriminated, can only be learnt by practice, and by the attentive study of the best masters.

69. In Expression, the student should observe, that the greatest care is to be used in drawing a portrait, that the features may be uniform and consistent with each other. The mouth is sometimes represented smiling, while the eyes are sad, and *vice versa*. The painter must, therefore, constantly bear in mind the general idea he has formed of the countenance he intends to express, and must be watchful of the corresponding forms of the features in moments of similar expression. The same remark may be extended to the larger portions of the figure. The same expressions must be clearly depicted in the motion or direction of the hands, arms, legs, and body, that appears to prevail in the countenance and turn of the head. It is this combination only which can give the exact resemblance of the expression of nature, under the impulse of which no particular limb ever deviates from the general intention of the whole body.

70. The Air principally regards the lines of the face or figure; the attire of the head or person; and the stature, or make of the general form. The proper lines of the face or figure depend on accuracy of drawing, and an entire agreement of the parts of the same form with one another. Nothing so entirely disguises or alters the appearance of an individual person as a change of head-dress, whether it is the

adjustment of hair or attire. The greatest attention, therefore, is to be used in adapting the arrangement of this part of the portrait to the general costume of the person represented. The stature and make, in the same manner, contribute to the force of resemblance, and never fail considerably to influence the air of the person. It is, therefore, requisite to the truth of a portrait, that this part of the picture should be as faithfully studied from the sitter as the face itself.

Obs. Vandyke's custom in painting portraits, was to appoint the day and hour for the person's sitting, and he worked not above an hour on any portrait, either in rubbing in, or finishing; so that as soon as the clock informed him that the hour was out, he rose, and dismissed his sitter, appointing another hour on some other day. His servant then came to clean his pencils, and brought a fresh pallet, while he was receiving another sitter, whose day and hour he had appointed. After having lightly dead-coloured the face, he put the sitter into some attitude, which he had before contrived; and, on grey paper, with white and black crayons, he designed, in a quarter of an hour, his shape and drapery, carrying it to the canvas at his leisure.

71. Though every part of the face contributes towards expressing the sentiments of the heart, yet the eye-brow is the principal seat of expression, and there the passions best make themselves known. The pupil of the eye, by its fire and motion, shows the agitations of the soul; but then it does not express the kind or nature of such agitation; whereas the motion of the eye-brow differs as the passions change their nature.

72. To express a simple passion, the motion is simple; to express a mixed passion, the motion is compound: if the passion be gentle, the motion is gentle; and if it be violent, the motion is so too. We may observe further, that there are two kinds of elevation in the eye-brows. One, in which the eye-brows rise up in the middle; this elevation, expressing agreeable sensations, and it is to be observed, that then the mouth rises at the corners: another, in which the eye-brows

rise up at the ends, and fall in the middle; and this motion denotes bodily pain; and then the mouth falls at the corners.

73. In Laughter all the parts agree; for the eye-brows, which fall toward the middle of the forehead, make the nose, the mouth, and the eyes, follow the same motion. In weeping, the motions are compound and contrary; for the eye-brows fall toward the nose and over the eyes, and the mouth rises that way.

74. The mouth is a part of the face, which particularly expresses the emotions of the heart: for when the heart complains, the mouth falls at the corners; when it is at ease, the corners of the mouth are elevated; and when it expresses aversion, the mouth shoots forward, and rises in the middle.

75. The head contributes more to the expression of the passions than all the other parts of the body put together. As humility, by hanging it down; arrogance, by lifting it up; languishing, by reclining it on one side; and obstinacy, when, with a stiff and resolute air, it stands upright, fixed, and stiff between the two shoulders. The head also best shows supplication, threat, pride, love, joy, and grief.

76. The whole face, and every feature, contribute something; especially the eyes, which are the windows of the soul. The passions they more particularly discover are, pleasure, languishing, scorn, severity, mildness, admiration, and anger; to which we may add joy and grief, if they did not proceed more particularly from the eye-brows and mouth; but when those two passions concur with the language of the eyes, the harmony is wonderful.

77. Though the passions of the soul are most visible in the lines and features of the face, they often require the assistance also of the other parts of the body. Without the hands, for instance, all action is weak and imperfect; their motions, which are almost infinite, create numberless expressions; it is by them that we *desire*, *hope*, *promise*, *call*, *send back*; they are the instruments of *threatening*, *prayer*, *horror*,

and *praise*; by them we *approve*, *condemn*, *refuse*, *admit*, *fear*, *ask*; and express our *joy* and *grief*, our *doubts*, *regrets*, *pain*, and *admiration*.

78. The effects of *Attention* are to make the eye-brows sink and approach the sides of the nose; to turn the eye-balls towards the object that causes it; to open the mouth, and especially the upper part; to decline the head a little, and fix it without any other remarkable alteration.

79. *Admiration* causes but little agitation in the mind, and therefore alters but very little the parts of the face; nevertheless the eye-brow rises; the eye opens a little more than ordinary; the eye-ball, placed equally between the eye-lids, appears fixed on the object; the mouth half opens, and makes no sensible alteration in the cheeks.

80. The motions that accompany *Admiration with Astonishment* are little different from those of simple admiration, only they are more lively and stronger marked; the eye-brows more elevated; the eyes more open; the eye-ball further from the lower eye-lid, and more steadily fixed; the mouth is more open, and all the parts in a much stronger emotion.

81. Admiration begets esteem, and this produces *Veneration*, which, when it has for its object something divine, or beyond our comprehension, makes the face decline, and the eye-brows bend down; the eyes are almost shut and fixed; the mouth is shut. These motions are gentle, and produce but little alterations in the other parts.

82. Although *Rapture* has the same object as veneration, only considered in a different manner, its motions are not the same; the head inclines to the left side, the eye-balls and eye-brows rise directly up; the mouth half opens, and the two corners are also a little turned up: the other parts remain in their natural state.

83. The passion of *Desire* brings the eye-brows close together and forwards towards the eyes, which are more open than ordinary; the eye-ball is inflamed, and places itself in the mid-

dle of the eye; the nostrils rise up, and are contracted towards the eyes; the mouth half opens, and the spirits being in motion give a lively glowing colour.

84. Very little alteration is remarked in the face of those who feel within themselves the *Sweetness of Joy*, or *Joy with Tranquillity*. The forehead is serene; the eye-brow without motion, elevated in the middle; the eye pretty open, and with a laughing air; the eye-ball lively and shining; the corners of the mouth turn up a little; the complexion is lively, the cheeks and lips are red.

85. *Laughter*, which is produced by joy mixed with surprise, makes the eye-brows rise towards the middle of the eye, and bend towards the sides of the nose; the eyes are almost shut, and sometimes appear wet, or shed tears, which make no alteration in the face; the mouth half open shews the teeth; the corners of the mouth drawn back cause a wrinkle in the cheeks, which appear so swelled, as to hide the eyes in some measure; the nostrils are open, and all the face is of a red colour.

86. *Acute pain* makes the eye-brows approach one another, and rise towards the middle; the eye-ball is hid under the eye-brows; the nostrils rise, and make a wrinkle in the cheeks; the mouth half opens and draws back: all the parts of the face are agitated in proportion to the violence of the pain.

87. *Simple bodily pain* produces proportionately the same motion as the last, but not so strong: the eye-brows do not approach and rise so much; the eye-brow appears fixed on some object; the nostrils rise, but the wrinkles on the cheeks are less perceivable; the lips are further asunder towards the middle, and the mouth is half open.

88. The dejection that is produced by *Sadness* makes the eye-brows rise towards the middle of the forehead more than towards the cheeks; the eye-ball appears full of perturbation; the white of the eye is yellow; the eye-lids are drawn down, and a little swelled; all about the eyes is livid; the nostrils

are drawn downward; the mouth is half open, and the corners are drawn down; the head carelessly leaning on one of the shoulders; the face is of a lead colour; the lips pale.

89. The alterations that *Weeping* occasions are strongly marked: the eye-brows sunk down towards the middle of the forehead; the eyes are almost closed, wet, and drawn down towards the cheeks; the nostrils swelled; the muscles and veins of the forehead appear; the mouth is shut, and the sides of it are drawn down, making wrinkles on the cheeks; the under lip pushed out presses the upper one: all the face is wrinkled and contracted; its colour is red, especially about the eye-brows, the eyes, the nose, and the cheeks.

90. The lively attention to the misfortunes of another, which is called *Compassion*, causes the eye-brows to sink towards the middle of the forehead; the eye-ball to be fixed upon the object; the sides of the nostrils, next the nose, to be a little elevated, making wrinkles in the cheeks; the mouth to be open, the upper lip to be lifted up and thrust forwards; the muscles, and all the parts of the face, sinking down and turning towards the object which excites the passion.

91. The motions of *Scorn* are lively and strong: the forehead is wrinkled; the eye-brow is knit; the side of it, next the nose, sinks down, and the other rises very much; the eye is very open, and the eye-ball is in the middle; the nostrils rise and draw towards the eyes, and make wrinkles in the cheeks; the mouth shuts its sides, sinking down, and the under lip is pushed out beyond the upper one.

92. An object despised sometimes causes *Horror*, and then the eye-brow knits and sinks a great deal more. The eye-ball, placed at the bottom of the eye, is half covered by the lower eye-lid; the mouth is half open, but closer in the middle than the sides, which being drawn back makes wrinkles in the cheeks; the face grows pale, and the eyes become livid; the muscles and the veins are marked.

93. The violence of *Terror* or *Fright* alters all the parts of

the face; the eye-brow rises in the middle; its muscles are marked, swelled, pressed one against the other, and sunk towards the nose, which draws up as well as the nostrils; the eyes are very open; the upper eye-lid is hid under the eye-brow; the white of the eye is encompassed with red; the eye-ball fixes towards the lower part of the eye; the lower part of the eye-lid swells, and becomes livid; the muscles of the nose and cheeks swell, and these last terminate in a point toward the sides of the nostrils; the mouth is very open, and its corners very apparent; the muscles and veins of the neck stretched; the hair stands on end; the colour of the face, that is, the end of the nose, the lips, the ears, and round the eyes, is pale and livid; and all ought to be strongly marked.

94. The effects of *Anger* shew its nature: the eyes become red and inflamed; the eye-ball is staring and sparkling; the eye-brows are sometimes elevated, and sometimes sunk down equally; the forehead is very much wrinkled, with wrinkles between the eyes; the nostrils are open and enlarged; the lips pressing against one another, the under one rising over the upper one leaves the corners of the mouth a little open, making a cruel and disdainful grin.

95. *Hatred* or *Jealousy* wrinkles the forehead; the eye-brows are sunk down and knit; the eye-ball is half hid under the eye-brows, which turn towards the object; it should appear full of fire, as well as the white of the eye and the eye-lid; the nostrils are pale, open, and more marked than ordinary, and drawn backward so as to make wrinkles in the cheeks; the mouth is so shut as to shew the teeth are closed; the corners of the mouth are drawn back, and very much sunk; the muscles of the jaw appear sunk; the colour of the face is partly inflamed, and partly yellowish; the lips pale or livid.

96. As *Despair* is extreme, its motions are so likewise: the forehead wrinkles from the top to the bottom; the eye-brows bend down over the eyes, and press one another on the sides of the nose; the eye seems to be on fire, and full of blood, the

eye-ball is disturbed, hid under the eye-brow, sparkling, and unfixed; the eye-lid is swelled and livid; the nostrils are large, open, and lifted up; the end of the nose sinks down; the muscles, tendons, and veins, are swelled and stretched; the upper part of the cheeks is large, marked, and narrow towards the jaw; the mouth drawn backwards, is more open at the sides than in the middle; the lower lip is large and turned out, they gnash their teeth; they foam; they bite their lips, which are pale, as is the rest of their face; the hair is straight and stands on end.

OF ANATOMY.

97. To ask if the study of Anatomy is useful to the perfect artist, is the same thing as to ask if, in order to learn any science, a man must first make himself acquainted with the principles of it. Nor is it merely to represent athletic and vigorous bodies, in which the parts are most bold and determined, that anatomy is requisite:—it should be understood to represent correctly persons of the most delicate frame and condition, even women and children, whose members are smoothest and roundest. But it is unnecessary for an artist to study systems of nerves, blood-vessels, and viscera, which are removed from the sight. It is enough to be acquainted with the skeleton; in other words with the figure and connection of the bones, which are the props of the human body; with the origin, progress, and shape of the muscles, which cover those bones; and with the different degrees in which nature has clothed the muscles with fat. Above all, he should know in what manner the muscles affect the various motions and gestures of the body.

98. Bones are the frame or prop-work of the body, and give it firmness and shape; but for their motions they are indebted to the muscles. A bone is generally distinguished by

anatomists, as having two parts, *viz.* its body and extremities. The body is called the *diaqhysis;* and the extremities are divided into *processes* and *epiphyses:* the former is an eminence continued from the body of the bones; but the latter is a sort of an appendage to the bone by means of a cartilage or gristle. Processes generally obtain their names from their shape, size, or use: thus a large process, of a spherical form, is called the *caput*, or head; if the head be flatted, it is termed a *condyle*, &c.

99. Bones are adapted to each other with that nicety, that the end of every bone is exactly received by, or admits, the end of another. This connexion of the bones is called their *articulations*, and is divided into moveable, immovable, and mixed articulation.

100. Bones are united by means of cartilages, and by ligaments. Cartilages are white, solid, smooth, substances, of an elastic nature, and of a fibrous texture; between the hardness of the bones and ligaments. Ligaments are white inelastic bands, very compact in their substance, and serve to connect the bones together.

101. The bones in the human frame are divided by anaomists into the head, trunk, and extremities.—The first division includes the bones of the cranium and face. The bones of the *trunk* are the spine, ribs, sternum, and bones of the pelvis. The *upper extremity*, on each side, consists of the two bones of the shoulder: namely, the scapula and clavicle; the bone of the arm, or os humeri, extending from the shoulder to the elbow; and bones of the fore-arm, from the elbow to the wrist, with those of the hand. The *lower extremities*, on each side, consists of the bones of the thigh, leg, and foot.

102. The HEAD is of a roundish figure, rather oval; its greatest diameter is from the forehead to the occiput. The upper part of the head is called the *vertex*, or crown of the head; the anterior, or the fore part, is the face; the upper of

this the *sinciput*, or forehead; its sides the temples; its posterior, or hind part, the *occiput*; and its interior part, the *basis*.

103. The bones of the head are divided into those of the cranium and face.—The cranium consists of,—1. The coronal bone, or os frontis. 2. The two parietal bones, or ossa bregmatis. 3. The os occipitis. 4. The two temporal bones. 5. The sphenoid bone. 6. The os ethmoides, or cribriforme. —All these, except the os occipitis and ossa bregmatis, are common both to the cranium and face.

104. The face is divided into the upper and lower jaws. The upper jaw consists of thirteen bones, exclusive of the teeth; six being placed on each side of the maxilla superior, and one in the middle. Of those which are in pairs are the ossa malarum, ossa maxillaria, ossa nasi, ossa unguis, ossa palati and ossa spongiosa inferiora; the single bone is the vomer.

105. The Trunk consists of the spine, thorax, and the pelvis.

106. The *spine*, or, *vertebræ*, consists of a great number of bones, forming a long bony column, somewhat bent at each end, and is generally described as like the letter *s*. It extends from the head to the lower part of the body; and is divided principally into two parts, the upper of which is called the *true vertebræ*, and the lower one, the *false vertebræ*, from the joints being immoveable in the adult. It is upon the bones of the spine that the body turns.

107. The spine answers many great and important uses: in its canal it secures the medulla spinalis from injury. It serves as a defence to the abdominal and thoracic viscera. It supports the head, and gives strength, grace, and motion, to the whole trunk of the body. From the number of its articulations it admits of a very free motion; and from its numerous processes, ligaments, cartilages, &c. it partakes of the strength and firmness of one entire bone. At the top, in the neck, it projects somewhat forward, in order to support the head.

Lower down in the thorax it curves outwardly, and thereby increases the cavity of the chest. In the loins it again projects forward, approaching the centre of gravity. Towards its inferior extremity it again recedes backward, and affords room for the cavity called the pelvis.

108. The *Thorax*, or chest, consists of the sternum, ribs, and dorsal vertebræ. The sternum is that long bone, which extends from the upper to the lower part of the breast anteriorly. It is articulated with the clavicle on each side, and also joined to the fourteen true ribs, viz. to seven on each side. The ribs are those bones formed like a bow, composing the sides of the chest. They are twenty-four in number, twelve on each side, distinguished into true and false ribs: the former are the seven upper ones articulated to the sternum; the other five, on each side, are called false ribs, and are not immediately attached to the sternum.

109. The *Pelvis* is that cavity of the body which contains the urinary bladder, *intestinum rectum*, and other viscera. It is composed principally of the os sacrum, os coccygis, and ossa innominata.

110. The Extremties are divided into the upper and lower extremity. The upper exremities consist of the shoulders, arms, and hands. The lower extremities contain the thighs, legs, and feet. The shoulder consists of two bones, the clavicula and the scapula. The clavicula, sometimes called the jugulum, or collar-bone, is not thicker than the little finger, but longer. The scapula, or shoulder-blade, is fixed to the hinder part of the true ribs, somewhat in the manner of a buckler. In shape it is nearly triangular; convex externally, and internally concave, to fit it to the form of the ribs.

111. The arm is divided into two parts, articulated together at the elbow; that part from the shoulder to the elbow is properly called the arm. The other part, from the elbow to the wrist, is called the fore-arm. The bone of the arm, or *os humeri*, is of a cylindrical shape, except at its extremities. The

fore-arm consists of two bones: the ulna, or elbow-bone, and the radius. The former is less than the os humeri, and becomes gradually smaller as it approaches the wrist; there are two processes, and two cavities at the upper part of this bone. The radius supports the two first bones of the wrist on the sides of the thumb; and the ulna is articulated with that bone of the wrist which corresponds with the little finger. The space between the ulna and radius is filled up by a ligament.

112. The hand comprises the wrist, and hand, properly so called. The carpus, or wrist, consists of eight small irregular shaped bones, placed in two unequal rows. Those of the upper row are articulated with the ulna and radius; and those of the lower row with the metacarpus. The metacarpus, or hand, consists of four bones, which serve to support the fingers. The five fingers of each hand consist of fifteen bones, disposed in three ranks, called phalanges: the bones of the first phalanx are the longest, and united to those of the metacarpus; those of the next phalanx less in size; and those of the last phalanx the least. All the bones of the wrist, hand and fingers, (amounting to twenty-seven in each hand) are articulated to each other, and their articulations strengthened by ligaments.

113. The lower extremities consist of the thighs, legs, and feet. Each lower extremity contains—1. The os femoris, or thigh-bone. 2. The rotula, or knee-pan. 3. The leg; and 4. The foot.

114. The os femoris, or thigh-bone, is the largest and strongest in the human frame; of a cylindrical shape, convex before, and behind somewhat concave, where it receives several muscles.

115. The rotula, patella, or *knee-pan*, is a flat bone about four or five inches in circumference, placed at the fore part of the joint of the knee. Its use is to defend the articulation of the knee from external injury; it also tends to increase the power of the extensor muscles of the legs, by removing their

direction farther from the centre of motion, in the manner of a pulley.

116. The *leg* is composed of two bones: the tibia, which is the larger and inner one, and the fibula, which is less. The tibia is of a prismatic form: the hinder part is the broadest; anteriorly it has a prominent ridge called the shin. The fibula is less than the tibia, and situated on the outside thereof; it is of a triangular form, somewhat hollowed internally. Its upper extremity does not reach quite so high as that of the tibia; but its lower extremity extends beyond the extremity of that bone.

117. The *foot* is distinguished as divided into three parts, viz. the tarsus, metatarsus, and toes. The tarsus consists of seven bones. The metatarsus consists of five bones, articulated by one extremity with the cuneiform bones and the os cuboides; and by the other extremity with the toes. Each of the toes consists of three bones, except the great toe, which has only two. The bones of the four smaller toes, like those of the fingers, are divided into three phalanges. The toes serve to bring the centre of gravity of the body perpendicular to the advanced foot: they also increase the concavity of the foot, and thereby enable it to adapt itself to any inequalities that may occur in walking.

118. The motions of the human body, are performed by means of MUSCLES. These are distinct portions of flesh, capable of contraction and extension, and are divided into *voluntary* and *involuntary* muscles. Some muscles act in opposition to each other, from whence they are called *antagonistæ*: thus every extensor muscle has a flexor one for its antagonist, and *vice versa*. Those muscles which concur in the same action are styled *congeneres*. That end of a muscle which adheres to the more fixed part of the bone is usually called the *origin*; and that which adheres to the more moveable part the *insertion*.

119. Each muscle contains two kinds of fibres; viz. one of a soft nature, red in colour, sensible, and irritable, called

fleshy fibres; the other kind, called *tendinous* fibres, are of a firmer texture, of a white glistening colour, insensible, and without irritability, or the power of contracting. The former generally prevail in the belly or middle part of the muscle, and the latter at the extremities: sometimes they are intermixed. If the tendinous fibres are formed into a round slender shape, they form what is called the *tendon* of the muscle; but when they are spread into a broad flat surface, the extremity of the muscle is called *aponeurosis*.

Obs. A muscle is composed of two tendinous and slender parts, one called the *head*, the other the *tail*, both terminating at the bones; and of an intermediate part, called the *belly*. The *action* of a muscle consists in an extraordinary swelling of this intermediate part, while the head remains at rest, so as to bring the tail nearer the head, and consequently the bone, to which the tail of the muscle is fixed, nearer to that bone on which the head is inserted. There are many motions, to effect which several muscles (called *co-operating muscles*) must swell and operate together, while those calculated to effect a contrary motion (called *antagonist muscles*) appear soft and flaccid. For example, the *biceps* and the *brachiæus internus* labour when the arm is to be bent, and become more prominent than usual; while the *gemellus*, the *brachiæus externus*, and the *anconæus*, whose office is to extend the arm, continue, as it were, flat and idle. The same happens respectively in all the other motions of the body. When the antagonist muscles of any part operate at one and the same time, such part becomes rigid and motionless. Mr. Bell has lately published a work on the Anatomy required by painters, and to that work we shall refer the student who is anxious to perfect himself in this branch of art.

120. *A muscle when in a state of action, and, consequently, contracted in its length, is increased in bulk, and thereby increases the surrounding parts; and when in a state of rest, and extended to its full length, its bulk and the surrounding parts are diminished.* This is the unavoidable consequence of the effect of muscular motion, which is performed by a dilatation in the breadth, and consequent contraction in the

length of the muscle, and *vice versa.* A member, therefore, by this means, acquires an additional bulk: this appears conspicuously in the arm; for when both parts of that member lie in the same line, it is nearly an eighth part of its circumference less, than when bent at the elbow; for the os humeri, withdrawing from the cavity of the cubitus, adds the circummensuration of an angle, formed by that motion, to the length of the arm; and this addition is greater or less as the angle made by bending is more acute or obtuse.

121. The *arm,* by its articulation at the shoulder, is capable of being moved in every direction; the farthest extent of the arm across the stomach, brings the elbow even with the pit of the stomach, whereby the two shoulders and that elbow form an equilateral triangle. When the two arms are extended behind the back, the elbows are distant from each other just the length of the fore-arm, from the elbow to the finger's end; so that two arms form a square. This member, when farthest removed from its natural posture, exerts the greatest force to recover its original station. Thus, in throwing a dart or stone, the arm is drawn back, to such a distance from the body, as to acquire a rapid motion in returning to its natural posture: and the force is greater or less, as the arm is drawn farther or less backward.

122. The *wrist* experiences a change in its dimension from the opening or shutting of the hand. When the hand is shut it becomes less than when the hand is open; the arm, on the contrary, becomes larger when the hand is shut, and less when it is open; the reason is, that in opening the hand, the muscles are extended; and when the hand is shut, contracted in length, and thereby dilates the arm. The fingers, as well as the toes, partake of the customary changes, of enlarging themselves on all sides, when the joints are bent; and suffering a proportionable decrease when extended.

123. The *legs* are more circumscribed in their motions than the arms. The chief use of these members, being either

to support the body, or as a mean of walking, their muscles and bones are much stronger than those of the arms, whereby they are capable of bearing longer and greater exercise. Their motions are more direct; and to turn the foot or leg outwards or inwards, requires a motion from the upper part of the os femoris or thigh-bone. The knee is the only joint that is diminished in bending, and augmented in its bulk by being straightened.

124. Upon every change of motion or attitude of the body a great variation is observable. For instance, in a figure standing perfectly still, resting equally on both feet, each leg sustains an equal weight, and the pit between the clavicles hangs in the perpendicular line, which rises from between the feet; but if the figure extend one arm, that pit quits its station, and recedes towards the other side; or if he move his leg, the pit is also moved. By the extension of his arm, the weight of his hand, together with that of his arm, act like a lever, and thereby alter the centre of gravity in his body, and render it necessary that he counterpoise it by some addition on the opposite side of the body, otherwise he would fall; therefore he inclines his shoulder to the contrary side: this inclination of the shoulder is observable, chiefly by the hips.

125. When a person from a state of rest proceeds to walk, he, in a similar manner, protrudes the centre of gravity forwards, and that in proportion to the briskness of his pace. In walking leisurely this is scarcely perceivable; but in one running swiftly it becomes very apparent; his head and shoulders advancing considerably before that foot which springs from the ground: and if he run against a strong wind, in order to overcome its resistance, he throws the centre of gravity still more forwards; and protrudes his head and shoulders so much, that, were the wind suddenly to stop, he would inevitably fall forwards.

126. In endeavouring to leap, a man bends his body to acquire a spring, thus quickly extends the junctures of the

thighs, knees, and feet: by this extension, the body describes an oblique line inclining forwards, and rising upwards; the motion directed forwards carries the body in that direction; and the motion intended upwards elevating it: these conjoined motions enable the body to describe a large arch, which is the direction described in jumping.

OF DRAPERY.

127. The beauty of drapery depends in a great measure on the form and disposition of the folds. Their construction should therefore form a principal object of the student's attention. The general form of the clothing must also be particularly regarded.

128. The drapery must be adapted to the quality of the wearer: kings, magistrates, the clergy, &c. are to have large ample draperies with flowing graceful folds; ladies, nymphs, &c., should have light soft draperies, with more numerous folds, and softer shades; peasants, slaves, &c., must have coarse short draperies, with fewer folds, agreeable to the coarseness of their garments.

129. The drapery is not so much intended to conceal the limbs or parts of the body which it covers, as to show us the true shape thereof, as far as probability and experience will justify. Many artists were so sensible of the necessity of this rule, that they first drew the naked figure, and afterwards clothed it.

130. The drapery must however not appear to bind the body; but should flow round it, and yet embrace it; and in such a manner that the body may seem to have a free motion, perfectly unencumbered.

131. The greater folds should be drawn first, and then divided into lesser ones; they should however be all as large as possible; that is, as far as the quality of the stuff, and quan-

tity of the clothing, will make probable. They must not cross each other injudiciously; nor run in a direction contrary to the natural inclination of the motion of the drapery.

132. A repetition of folds of a circular form serves to indicate a fore-shortened limb. In the order of drawing the drapery, it must be observed, that those parts which adhere closest to the body are to be described first, before the other parts which fly loose; otherwise the student may place his figure in a wrong position, if he draw the looser parts first.

133. The clothing must partake of the attitude of the figure. Where the figure inclines inward, the drapery must also incline the same way, if it sit close to the body; but, if it be loose, it will hang pendant: where the body bends outwardly, the garments will also have the same appearance; in which place they will be nearly, and sometimes wholly, destitute of folds.

134. Those parts where the drapery sits closer to the body must have smaller and narrower folds. Folds not only give grace and dignity, but, if judiciously constructed, impart much spirit and vivacity, as they may be made to represent motion, more or less violent, by the moving member which creates them, drawing them with different degrees of force.

135. If the figure be in motion, the drapery should flow gently the contrary way, as if gently blown by the wind; and if the motion be swift, the drapery should flow to a greater extent, the wind acting upon it with more violence.

136. If the figure be at rest, the drapery should indicate no motion, but fall in easy graceful folds. In shading the drapery, it must be remembered, that each fold consists of two shades, and no more; the inner side being shaded the deepest. The lighter parts of the figure are not to have very deep shades, lest they appear too much indented; and by these means the members appear broken.

137. In silks and fine linen, the shades should be thick and soft, consequently the shadows must be light, and the folds

small. In a word, the learner must be very attentive to nature in this, as in every other part of the art: he must avoid taking his rules for drapery from observations of statues however excellent, as in this particular they are very imperfect copies.

OF PERSPECTIVE AND OF LANDSCAPE.

138. In landscapes, the student must be particular with regard to the relative sizes of objects: upon which the principal beauty of this part of the art depends. He must habituate himself to judge of distances, and measure them by his eye. It is needless, after the general directions, to deliver any rules for drawing landscapes from *copies*, as by this time the student is supposed capable of imitating all the different objects of which a landscape consists, consequently, he will find no more difficulty in drawing them in one piece than separately: but when Nature herself becomes his copy, separate rules are necessary.

139. The study of perspective, or of size and relation, should go hand in hand with that of anatomy, as equally fundamental and necessary. The contour of an object drawn upon paper or canvas, represents nothing more than such an intersection as would arise on a glass put in the place of the paper or canvas. The situation of an object on the other side of a glass being given, the delineation of it on the glass itself depends entirely on the situation of the eye on this side of the glass. Perspective, according to Da Vinci, forms the reins and rudder of painting. It teaches in what proportion the parts fly off, and lessen to the eye; how protruding figures are to be placed on a plain surface, and how fore-shortened.

140. Artists are apt to annex ideas of great intricacy to the practice of perspective. Nothing, however, is more simple, and it is founded, and arises entirely out of the obvious principle, *that the apparent size of an object is in the contrary*

proportion of its distance from the eye. This simple principle duly considered, and applied by the Artist in practice, constitutes the whole science of Perspective.

141. The art of drawing in PERSPECTIVE proposes, therefore, to represent every object in its proper place, and in its relative size and figure, as seen from the spot where the view is taken. The eye of the draughtsman is supposed to be *fixed*, and he is to pourtray every object as though he saw it through a pane of glass the size of his paper or canvas. The general principles of practice are not difficult, provided two or three technical terms and general principles are well understood.

Obs. In drawing after nature, it is useful in early practice to adopt some mechanical means of fixing the point of view or sight. This may be done by a hole through a staff fixed in the ground; and sometimes, still further to assist the eye, a frame with cross threads or wires is affixed between that sight-hole and the objects to be drawn. In that case the paper or canvass is divided into a like number of squares, and the objects in the squares of the frame are exactly transferred to their corresponding squares on the paper. After some practice, however, such mechanical means will be found unnecessary.

142. When a draughtsman has formed a scene in his mind, and supposed that the principal figures lie close to the back of his canvas, he is next to fix upon some point on his side of the canvas, from which his eye is supposed to view the objects on the other side. In choosing this point, which is called THE POINT OF SIGHT, regard should be had to its situation to the right or left of the middle of the canvas: but, above all things, to its distance and its height with respect to the *lower* edge of the canvas; which edge is called THE BASE OR GROUND LINE, and is parallel to an *horizontal line* that passes through *the point of sight.*

143. By assuming the point of sight, and consequently the horizontal line, too low, the surfaces or planes upon which the figures stand will appear a great deal too shallow; and by assuming it too high, they will appear too steep, so as to render

the piece less light and airy than it ought to be. In like manner, if the point of sight be taken at too great a distance from the canvas, the figures will not admit of lowering enough to be seen with sufficient distinctness; and if taken too near it, the lowering will be too quick and precipitate to have an agreeable effect.

144. When a picture is to be hung high, the point of sight should be assumed low, and *vice versa;* in order that the horizontal line of the picture may be, as near as possible, to the horizontal plane of the spectator. When a picture is to be placed very high, it will be proper to assume the point of sight so low, that it may lie quite under the picture, no part of whose ground is, in that case, to be visible. There is seldom any necessity for such extraordinary exactness: and unless in some particular cases, the point of sight had better be rather high than low; because we are more accustomed to behold objects on the same plane with ourselves, than either higher or lower.

145. THE POINT *of* DISTANCE, or supposed distance of the eye from the picture or glass, is next to be determined. In doing this, a draughtsman should attend to three things: first, that the spectator may be able to take in, at one glance, the whole and every part of the composition; secondly, that he may see it distinctly: and thirdly, that the lowering of the figures and other objects of the picture be sufficiently sensible. Practice in copying and in designing after good masters supersede precise rules for doing this with happy effect.

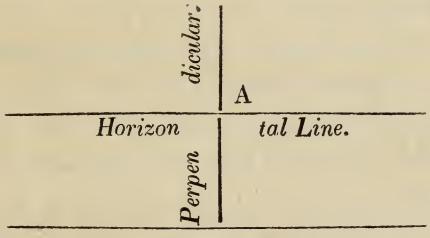
Obs. The best landscapes include an angle of from 45 to 60 degrees, or the eighth or sixth of the whole Panorama of 360 degrees.

146. THE GROUND PLANE, is the plane or level on which stand both the spectator and the objects that are to be drawn. The PERSPECTIVE PLANE, is a supposed plane standing perpendicular upon the ground plane, as the pane of glass, on which the images of objects are supposed to be intercepted; so that their perspective appearance, when drawn, is the appearance

they would have on this perspective plane. THE GROUND LINE, is the line on which the perspective plane or glass is supposed to rest.

147. THE POINT *of* SIGHT is that point in the perspective plane which is nearest to, or opposite, the eye, and is at the same proportional distance from the ground line as the height of the eye is above the ground plane. The HORIZONTAL LINE, is the line upon the perspective plane, drawn through the point of sight, parallel to the ground line; and THE PERPENDICULAR is a line on the perspective plane, drawn through the point of sight perpendicular to the ground line and to the horizontal line.

Obs. The point A, where the perpendicular and horizontal lines cross, is the point of sight, or vanishing point, of all lines running out from the eye perpendicular to the perspective plane.



Ground Line.

148. POINTS *of* DISTANCE are points on the perspective plane set off from the point of sight, sometimes on the horizontal line, sometimes on the perpendicular, at the same proportional distance from the point of sight, as the eye itself is from the objects. MEASURING POINTS are points from which any lines in the perspective plane are measured, by laying a ruler from them to divisions laid down upon the ground line. VANISHING POINTS are points on the perspective plane in which parallel lines in nature seem to meet or vanish to the eye.

Obs. Vanishing points produce that effect of which painters of scenery avail themselves, and is founded on the principle, that if the earth were an extended plain, all objects would seem to vanish from their progressive smallness. Of course, if any set of objects vanish in

a right line from the eye, the diminution takes place more rapidly than when it takes place obliquely; and the vanishing point in objects receding opposite the eye is in the point of sight, but if they recede obliquely then the vanishing point is to the right or left of the point of sight.

149. The rules for drawing are, that all lines that are parallel to the perspective plain, must be drawn parallel to each other; and that all *other parallel lines meet, or have vanishing points* in some part of the perspective plain. If the lines lie upon *the ground plane*, they vanish somewhere in *the horizontal line*; which is, therefore, called the vanishing line of the ground plane. If the parallel lines run perpendicular from the ground line, they vanish in the point of sight; but if they are oblique to it, or have a declination from such perpendicular, the angle of this obliquity or declination must be set off to the right or left to find the vanishing point.

150. All the measures of lines upon the ground plane are to be laid down upon the ground line, and the measuring point of all lines parallel to the ground line, is either of the points of distance on the horizontal line, or the point of sight. The measuring point of any line, perpendicular to the ground line, is in the point of distance on the horizontal line; and the measuring point of a line oblique to the ground line is found by extending the compasses from the vanishing point of that line to the point of distance on the perpendicular, and setting it off on the horizontal line.

151. The pictures of all lines parallel to the perspective plane are parallel to the lines themselves. The pictures of all vertical lines are vertical, and the pictures of horizontal lines are horizontal, because these lines are parallel to the perspective plane. The point of sight is the vanishing point of all lines perpendicular to the perspective plane. Every line which in the object is straight, perpendicular, or parallel to its base, should be so in its delineations. Objects standing on the right hand, should be placed on the right hand of the point of sight, and those on the left hand on the left hand of the point.

152. In setting off altitudes, measure the height from the ground line, and a line from that point to the horizontal line, wherever it happens to be placed. If in a landscape there are any standing waters, place the horizontal line level with the farthest appearance of it. If there be any houses, consider their position, that you may find from what point in the horizontal line to draw the front and sides.

Obs. It is in vain, by the rules of perspective, to describe all the little hollows and prominences of objects; the different light and shade of their parts; the windings and turnings of the boughs and leaves of trees; or the features and limbs of men, &c. Its peculiar province is to exhibit a kind of ground-work, and to ascertain the general proportions and places of the objects, leaving the rest to be finished, beautified, and ornamented by experience. Yet the knowledge of the general laws of this science is of great and necessary use to inform the judgment in what manner the images of any proposed lines should run, which way they should tend, and where terminate; and when the ground or general plan of the principal parts of a picture are laid down according to rule, every remarkable deviation from the rules will be the more readily perceived, and be the easier avoided or rectified.

153. In sketching after nature, you are to consider your paper as a piece of upright glass, through which you see the objects in their natural sizes and productions. The *first* thing is to determine on the boundaries of your picture; the *second* on the middle point; and the *third*, on the parallel height of the principal set of objects.

Obs. 1. All this is best done by holding the pencil at arm's length, first perpendicularly, and then horizontally, and by repeating the same guide or guage as often as is needful while the sketch proceeds.

Obs. 2. The student should take his station on a rising ground, where he may have a large field of view, and an extended horizon.

Obs. 3. He should next divide his paper or tablet, upon which he is at work, into three equal divisions, from the top to the bottom, and (if he think necessary) into any number of equal divisions, from one side to the other, and in his own mind divide the landscape or field of view exactly in the same manner.

Obs. 4. Then let him describe, upon the middle division, those objects which are directly before his eyes; next those towards his left hand; and, lastly, those on his right hand: observing that he change not the situation of his body, nor move from his place, till he have obtained a draft of the whole.

Obs. 5. The nearest objects should appear the highest; and those farther off decline in height according to their distance; the most distant appearing almost level with the horizon.

Obs. 6. They are also to decrease in the strength of their shades, as well as size, in proportion to their distance from the observer.

Obs. 7. In consequence of their being more faintly shaded, they will appear less distinct, and more confused, the further they are removed from the point of view.

Obs. 8. The lights and shades must all fall the same way.

Obs. 9. Every thing is to have its proper motion according to nature: as trees shaken by the wind, the greater branches bending less than the smaller ones; and the tall slender trees more than the stout ones: observing they all incline the same way.

Obs. 10. In drawing the sky, those clouds nearest the observer must be placed towards the top of the piece, and more strongly shaded, and distinctly marked, than the others more remote: and the farthe they are removed from the observer, the lower must be their situation, and more faint their shades, till they mingle with the horizon, where they become lost to view.

Obs. 11. Water has very different appearances: when it is calm and still, it reflects the light strongly, and must therefore have little or no shade: and if it be required to be represented as reflecting a strong light, the adjacent parts must have some shade, in order to form the contrast. When violently agitated, it is to have some very deep and broken shades; and other parts striking against rocks, ships, or other objects, are to have a black and white contrasted shade, to represent the foaming of the water.

154. It is necessary that the student be cautioned against falling into an error too prevalent among artists, viz. that of making their objects in the piece rise higher, the farther they are removed from view (which makes the landscape appear as if it was situated on the side of a hill), on the bottom of which

the artist took his station. These pieces always have an ungraceful appearance, not to mention the absurdity of the idea, and how seldom such a view occurs in nature. When this, however, is the case, the artist must draw his piece in this form; for he can never err, while he follows that great mistress of perfection, *Nature.*

155. At the same time, it is necessary to fix the point opposite to the eye, called the point of sight, and the horizontal line passing through the point of sight, and to remember that all objects are *to be drawn of a size inversely proportioned to their distance from the point of sight.* As objects continually diminish as they recede, even till they vanish, the horizontal line contains, therefore, the vanishing points of all objects standing on the level of the spectator.

156. Having fixed five or six main points of the picture, proceed to sketch faintly the shapes of all the principal objects —then join them together—then correct their figures and outlines, and then mark in, or indicate the shadows.

Obs. Prefer to redraw an incorrect line to the rubbing of it out, as the false line will guide to the true one, and take care before you finish that every object has its true figure, as seen from the fixed point of sight. Of course, only the objects in the foreground require finishing, and the distant objects are to be expressed in their general effect, lightly and imperfectly.

157. Authors usually make a great parade about the intricacy of perspective, and treat it as a science of mystery and difficulty. It is, however, not so, and may be learnt as easily as any of the rules of Arithmetic. Its purpose is to enable us to draw objects as they appear in nature, and this will be easy to persons having an accurate eye by a slight attention to some plain principles.

158. The student should first understand that *all* objects of the same real size appear diminished in proportion *to their distances* from the eye, and in understanding this, he understands the whole arcana of perspective. Thus, a man six feet high appears twice the height at ten feet distance, than he does

at twenty feet, and ten times as large as he would at a hundred feet distance.

159. And a man six feet high, at ten feet distance, is as large to the eye as a house sixty feet high, at a hundred feet distance. All then that is requisite in drawing any objects from nature is to draw the objects of a size diminished in proportion to their actual distances, and according to their actual sizes. Thus some object should be drawn in the foreground of a known size, and then all other objects should be reduced according to their distances and sizes, in their proportion to that object.

Obs. 1. Suppose a tree one hundred feet from the draughtsman, and one hundred feet high, is made ten inches long in the drawing, it is evident that a house fifty feet high, and one thousand feet distant, should be half an inch long in the drawing. Measured accuracy is unnecessary; it is simply necessary to guess with moderate precision at the relative heights and distances, and after the purpose has been effected in a few exercises, it will be easy to pursue it mechanically.

Obs. 2. All the rules of perspective proceed on the principle of admeasurement, so that nothing is lost by substituting a ready and brief calculation for geometrical projections, by the scale and compasses, but measurement is seldom necessary.

Obs. 3. The size of every object is to be drawn *directly* as the size, and *inversely* as the distance; if, therefore, you MULTIPLY the *drawn* dimensions of one object by its *distance*, and by the *real* dimensions of some other object, whose drawn size is required; and then DIVIDE that product by the product of the *real* size of the drawn object with the *distance* of the required object, the QUOTIENT is the the size which that object is to be drawn. Thus, if a man six feet high, at four yards from the perspective plane, be drawn two inches high, how large is a pillar to be drawn which is sixty feet high and forty yards distant? Multiply the two by four and by sixty, and the product is 480; and then six by forty is 240, which goes *twice* in 480, consequently the pillar must be *two* inches, or exactly the height of the man. The variations of the distance from the ground line will give the true effect in the picture. Nothing, therefore, is more easy than to ascertain the relative sizes to arithmetical exactness, at which objects should be drawn, till the eye determines it more readily by experience.

ON COLOURING.

——————— Who can paint
Like Nature? Can Imagination boast,
Amid its gay creation, hues like her's?
Or can it mix them with that matchless skill,
And lay them on so delicately fine,
And lose them in each other, as appears
In ev'ry bud that blows?

THOMSON.

160. COLOURING is that important part of art in which the artist imitates the colours of all natural objects, and gives to artificial objects those hues which are most calculated to please or to deceive the sight. It is the duty of the colourist to consider, that as there are two sorts of objects, the natural or real, and the artificial or painted, so there are also two sorts of colours, viz. the natural, or that which makes all the objects in nature visible to us, and the artificial, or that which, by a judicious mixture of simple colours, imitates those natural ones in all their various situations and circumstances.

161. An artist must first endeavour to acquire a perfect knowledge of these two sorts of colours; of the natural, in order to distinguish with precision which of them he ought to imitate; and of the artificial, in order to compose the tint most proper for representing the natural colour. The natural colour is of three sorts: 1st, the true colour of the object; 2d, the reflected colour; 3d, the colour of the light incidental to the object. In the artificial colours, their force and softness should be distinguished separately and by comparison, in order that a proper judgment may be exerted in heightening or attenuating them, as the subject may require.

162. It should be considered, that a picture is, for the most part, a flat superficies; that, some time after the colours are laid on, they necessarily lose their freshness; and the distance at which a picture is viewed takes from it much of its

brightness and vigour; and it is, therefore, impossible to guard against these drawbacks on the effects of his pencil, without a complete mastery of that artifice which is the chief object of the art of colouring.

163. Although imitation is the principal aim of colouring, the artist must by no means be the slave of natural objects, but the judge and judicious imitator of them: he must not imitate all the colours which present themselves indifferently to his eye; but he must chuse the most proper for his purpose, and add or temper with others, to complete the beauty of effect in his work. He must sometimes abate the vivacity of life, and sometimes strive to heighten it by superior force and brightness of colours, in order to convey to the eye, with precision and truth, the spirit and real character of the object. There are few, and those only among the greatest painters, who have arrived at the perfect management of this difficult part of art.

164. On the apposition of colours, and on the knowledge of *chiaro-scuro*, depends all the harmony of colouring. In what that happy arrangement of colours consists, which produces effects delightful to the eye, no rules can pretend to ascertain. If the source of information in this point is not in the mind of the painter, he will in vain seek for it elsewhere. Improvement, however, may, and must, be superadded to natural discrimination: to acquire the necessary improvement, he will find the best school in the works of those great masters who have possessed the power of colouring in an eminent degree.

165. We must learn to view Nature to advantage, in order to represent her well. There are two manners of colouring: the one depending on habit, the other on the true knowledge of colours. The first is confined, the second unlimited. The harmony of Nature in her colours arises from objects participating of one another by reflection; for there is no light which does not strike some body; nor is there any enlightened body which does not reflect its light and colour at the same time, in

proportion to the force of the light, and according to the nature of the colour. This participation of reflection in light and colour, constitutes that union of colouring which it is the business of the painter to imitate.

166. The desirable union of colour is sometimes considerably aided in pictures by the process of glazing; that is, by the use of colours which, having little body, are diaphonous; and are, by means of a light brush or pencil, passed over (or, as painters express it, *scumbled* over) such parts of the work as are unpleasantly staring, or otherwise discordant. Variety of tints, very nearly of the same tone, employed in the same figure, and often upon the same part, with moderation, contribute much to harmony.

167. The turn of the parts, and the outlines which insensibly melt into their grounds and artfully disappear, bind the objects together, and preserve them in union; as they seem to conduct the eye beyond what it sees, and persuade it that it sees what it really does not see, or at least that it conceives that continuity which the extremities of the objects conceal.

168. Any loading or overcharging of colouring, for whatever purpose it is used, must be so discreetly managed, as not to destroy the character of the object. The repetition of the same colour in a picture is to be avoided, unless where it serves to connect the various masses of a composition. The eye becomes tired with viewing the same object: it loves variety artfully presented to it.

169. Several colours which, placed unmixed by one another, have a kind of aerial brightness, when mixed together, produce a disagreeable earthy colour: for instance, ultramarine with fine yellow, or fine vermilion. Colours which by mixture lose strength, and become harmonious, are called broken colours, and contribute as greatly to the sweetness and softness of tones in pictures as they substract from their brightness.

170. The knowledge of lights and shades forms an im-

portant part of the art of colouring. But the incidence of particular lights and shades on bodies placed on certain planes, and exposed to certain lights, is a very small part of that general knowledge of effect which is denominated chiaro-scuro, by which is meant the art of skilfully distributing the lights and shades which ought to appear in a picture as well for the repose as satisfaction of the eye.

171. *Chiaro-scuro*, as it is called, demands a perfect knowledge of the effects of *light and shade*, of aerial perspective, of the proportional force of colours, or of those qualities by which they appear to advance to, or recede from, the eye, and of their various degrees of transparency or opaqueness. It consists, 1st, in connecting and combining the figures or objects of a composition in such masses of light and of shade, as are both most pleasing to the eye, and the best calculated for the just development and display of the subject. 2dly, In assigning to each object the colour most corresponding (on account of the force or qualities above-mentioned) to its respective place in the general mass or group, and at the same time best harmonizing with the other colours of the picture, either by its natural and proper tone, or by the reflected hues which it receives from adjoining or surrounding objects. The beauty of these reflexes depends on the skilful adaptation of transparent or opaque colours. 3dly, In the judicious introduction of such accidents as contribute to strengthen the general effect and character of the work. It is on chiaro-scuro, that depends the expression of the character of a picture, whether it is gay or gloomy, cheerful or solemn.

172. The distribution of objects forms the masses of chiaro-scuro, by combining or connecting their lights and shades in such a manner as to prevent the eye from wandering confusedly over the work. Titian exemplified this precept in the instance of a bunch of grapes, of which each grape, if seen separately, would have its light and shade in a similar degree, and thus distracting the sight, would produce a tire-

some confusion; but when collected in one bunch, and becoming but one mass of light and shade, the eye is capable of embracing them altogether as a single object.

173. In shading with Indian ink, mix three gradations of tints, a *weak*, a *middle*, and a *deep* tint. The weak tint is to be laid over every part, except the whites. The middle tint is then, when the former is dry, to be laid over all the parts receding from the light, leaving a part of the weak tint between the white and the middle tint. The deep tint is then to be employed to put in the masses and the parts requiring force.

Obs. Sometimes the edges of the tints are fined off with water, and the whole may be finished by repeated washings over the tint; but it will then have a woolly effect, and want spirit. Four successive tints are also frequently used for high finishing. Indian ink drawings are often improved by a wash, or two washes, of yellow ochre, sometimes followed by light red or lake.

174. Colours should be used with great caution and judgment. Nothing is so disgusting as to see coloured drawings where the reds, greens, and blues, are laid on in the most violent manner, without any regard to harmony. Those who execute such vile daubings, will say in their defence, that nothing can be greener than grass, nor bluer than the sky; but they should consider, that nature employs such a multitude of little shadows, and such a variety of different tints intermixed with her colours, that the harshness of the original colour is corrected, and the effect of the whole is very different from a raw and distinct colour laid upon white paper.

175. A single distinct colour is always bad in a landscape; and the tints should always be varied and broken in every part. Though we should have recourse to the study of nature, in preference to any master, for the study of colouring, yet it requires some judgment to know what part of nature is to be studied, and what is to be avoided; for in nature herself, there are many parts which are bad, and to copy them would do more harm than good.

Obs. 1. The student in colouring must examine, with every possible attention, the colouring of old walls, broken and stained by time and the weather, old thatch, old tiles, rotten wood; in short, all objects which are covered with moss, stains, and tints of various kinds; there he will find all that is most perfect and harmonious in colouring. Let him copy these with every possible care, and avoid, as bad, all objects which are of a uniform decided colour. This has been the practice of all the great masters who have excelled in this captivating part of the art. In short, after learning the first principles of drawing, he cannot too soon have recourse to nature; he will obtain from her the materials for acquiring every species of excellence, in a greater degree than from the works of the first masters. The study of these, however, will greatly abridge his labour, and it should go hand-in-hand with drawing from nature.

Obs. 2. In landscapes, the scenes most generally to be met with, and which are most generally interesting, are of the picturesque kind, such as cottages and rustic scenery. In these straight lines should be avoided, and every thing that is regular and formal. In general, every thing that is old and broken is preferable to what is new, as affording more variety. Old thatch, old tiles, old plaister, old fencing, are more picturesque, and fitter for the pencil than the same species of objects when new and entire. An old house, almost tumbling down, whose parts are broken and ruinous, some bulging out, and the whole stained and tinted with a variety of chaste and harmonious colours by the pencil of nature, is infinitely preferable, as a subject for a picture, to any new house or gentleman's seat, though the latter may be a more comfortable habitation to live in. In the same way, an old worn-out cart-horse is a much fitter animal to draw from, and a finer subject for the pencil, than a sleek and clean poney; and an ass with a rough coat is more picturesque than the same animal kept in nice order. In subjects of the grand kind, on the contrary, such as magnificent buildings, cities, streets, &c., straight lines are often necessary and proper, as these objects are rather of the sublime than the picturesque kind; and straight lines, and a degree of regularity, form part of the sublime. The employment of straight lines, however, requires great skill and knowledge of the art, to prevent them from appearing bad,

and they can only be employed with success by those who have attained to considerable eminence.

176. The sun's rays are composed of seven primitive colours; but late observations have reduced them to three;—*red*, *blue*, and *yellow*; so that all the vast variety of tints which we see in nature, is formed by the mixture of these in various proportions. If we had pigments of these colours perfectly pure, we should have no occasion for more than these three; but this is not the case, and therefore we are obliged to have recourse to materials of other broken tints.

Obs. The colours that are found to be the most useful in drawing landscapes in water colours are, lake, indigo, Prussian blue, gamboge, light red, yellow ochre, burnt terra Sienna, burnt umber, and Cologne earth. Some of the other colours may be occasionally useful; but these are all that are necessary for general use. The best sort of water-colours are those mixed with gum and made up into cakes, as these may be used by rubbing upon a tile, in the same manner as Indian ink.

177. The principal colours used by painters are red and white lead; yellow and red ochres; several kinds of earth, umbre, orpiment, lamp-black, burnt ivory, black lead, vermilion, gamboge, lacca, blue and green ashes, verdigris, bistre, bice, smalt, carmine, ultramarine: each of which, with their uses, &c., are to be found under their proper articles. Of these colours some are ground with gum-water, some used with oil, and others only in fresco.

178. Artists reduce all the colours they use under the two classes of *dark* and *light* colours. Black, and all that are obscure and earthy, as umbre, bistre, &c. are of the first description. Under light colours are comprehended white, and all that approach nearest to it. Colours are also distinguished into *simple* and *mineral*. Under simple colours they rank all those which are extracted from vegetables, and which will not bear the fire; as the yellow made of saffron, French berries, acca, and other tinctures extracted from flowers, &c.

179. Colours may be considered as either single or compound. Single colours are such as require nothing to be superadded to them, in order to make a full strong colour, without regarding whether they are formed of many or few ingredients; and in this view, white-lead, red-lead, vermilion, calces of iron, &c. are simple colours. Compound colours are formed by the union of two or more colouring substances; as blue and yellow united together to form a green, red and yellow to form an orange, a white earth or calx, with the red colour of cochineal or brazil, to form a lake, &c.; and thus carmine, lake, rose-pink, Dutch-pink, English-pink, &c. are compound colours.

180. The general or simple colours are—white, black, brown, red, yellow, blue, and green.

The *Whites* are—Ceruse, constant white, white lead, Spanish white, flake white, and spodium.

Blacks.—Burnt cherry-stones, ivory black, Keating's black, and lamp-black.

Browns.—Spanish brown, Spanish licorice, umber, bistre, burnt terra di Sienna, unburnt ditto, and sessia.

Reds.—Native cinnabar, burnt ochre, Indian red, red-lead, minium, lake, vermilion, carmine, red-ink, and Indian lake.

Yellows.—English ochre, gall-stone, gamboge, masticot, ochre de luce, orpiment, Roman ochre, Dutch pink, saffron-water, king's yellow, gold yellow, and French berries.

Blues.—Saunder's blue, terre blue, blue verditer, indigo, litmose, smalt, Prussian blue, light ditto, ultramarine, ultramarine ashes, and blue bice.

Greens.—Green bice, green verditer, grass green, sap green, and verdigris distilled.

Obs. In using colours and preparing the various tints, saucers and a delf-palette with a division, is required. The cake of colour is dipped in water, rubbed on the saucer or palette, and then reduced

with water to its proper tint. Pencils of all widths and sizes should also be at hand for washes of various sizes.

181. The Mixed Colours are as follow:—

Changeable Silk.—Vermilion or Indian red and masticot water, shaded with sap-green and verdigrise: *or*, lake and yellow, shaded with lake and Prussian blue.

Cloud Colour.—Light masticot; *or*, constant white (Barytes) and Indian ink, with vermilion; *or*, a little lake and Antwerp blue makes a very agreeable cloud colour, for that low part next the horizon.

Crimson.—Lake, with a little vermilion, shaded with lake and carmine.

Flame Colour.—Vermilion and orpiment; *or*, gamboge, shaded with minium and red-lead.

Flesh Colour.—Vermilion or Indian red; for a swarthy complexion, burnt sienna, shaded with Indian ink.

French Green.—Light pink and Dutch bice, shaded with green pink.

Hair Colour.—Masticot, ochre, umber, or burnt terra di Sienna.

Lead Colour.—Indigo and white.

Light Blue.—Blue bice; *or*, blue verditer; *or*, light wash of Antwerp blue.

Light Green.—Antwerp blue and gamboge; *or*, gamboge and verdigrise. The chief use of this green is to lay the ground-colours for trees, fields, &c.

Lion Tawny.—Red lead and masticot, shaded with umber.

Orange.—Red lead and a little masticot, shaded with gall-stone and lake.

Orange Tawny.—Lake, light pink, a little masticot, shaded with gall-stone and lake.

Pearl Colour.—Faint wash of carmine, shaded with lake.

Popinjay Green.—Green and masticot; *or*, gamboge and a little indigo, shaded with indigo.

Purple.—Blue bice, or Prussian blue and lake; *or*, a solution of logwood.

Russet.—Cherry-stone black and white.

Scarlet.—Red lead and lake, with or without vermilion.

Sea Green.—Prussian blue, gamboge, and a little Indian ink.

Sky Colour.—Light masticot, for the lowest and lightest parts; second, vermilion very faint; third, Antwerp blue faint; fourth, the same rather darker. These are all to be softened into one another at the edges, so as not to appear harsh.

Sky Colour for Drapery.—Antwerp blue, shaded with indigo.

Straw Colour.—Masticot and a very little lake, shaded with Dutch pink.

Violet Colour.—Antwerp blue and lake, shaded with indigo; *or*, fine Dutch bice and lake, shaded with indigo and litmus, smalt, and bice, the latter most predominant.

Water.—Antwerp blue faint, shaded with indigo; *or*, blue verdigrise, shaded with indigo.

Alum and sal ammoniac considerably heighten the colour of cochineal, brazil, turmeric, fustic, madder, logwood, &c. The same thing is done, though in a less degree, by common salt, Glauber's salt, salt-petre, and many other of the neutral salts.

Solutions of iron in all the acids strike a black with every one of the above substances; and likewise with sumach, galls, and other astringents. Solutions of lead universally debase red colours to a dull purple. Solution of copper changes the purple colour of logwood to a pretty good blue; and, in general, solutions of this metal are friendly to blue colours. The effects of solutions of gold, silver, and mercury, are not so well known: they seem to produce dark colours of no great beauty.

The most powerful solution, however, with regard to a great number of colours, is that of tin, as it is made in aqua regia. Tin has, in a state of solution, the most extraordinary effects. The colour of cochineal is changed by it into the most beautiful scarlet; a similar change is made upon the colouring matter of gum lac. Brazil-wood is made to yield a fine purplish crimson; logwood, a beautiful dark purple; turmeric, fustic, weld, and all yellow-colouring woods and

flowers, are made to communicate colours far more beautiful than can be got from them by any other method. The blue colour of the flowers of violets, eye-bright, iris, &c., are heightened so as to equal, if not excel, the blue produced by a solution of copper in volatile alkali. In short, this solution seems to be of much more extensive use in colour-making, when properly applied, than any thing hitherto thought of. It is not, however, universally serviceable. The colour of madder it totally destroys, and likewise that of saf-flower, changing them both to a dull orange. It likewise spoils the colour of archil: and what is very remarkable, the fine red colour of tincture of roses made with oil of vitriol, is by solution of tin changed to a dirty green.

Those substances which are most remarkable for keeping their first colour, contain a gummy matter, so combined with a resinous one as to be soluble both in water and spirit of wine.

The most durable red colour is prepared from gum lac. This is resinous, though at the same time so far glutinous, that the colouring matter can be extracted from it by water. Next to gum lac are madder roots and cochineal. The colouring-matter of the former is soluble both in water and spirit of wine. Along with the pure red, however, there is in madder a kind of viscous astringent substance, of a dark brown colour, which seems to give durability to the whole. The colouring-matter of cochineal, though soluble both in water and spirit of wine, is very tenacious and mucilaginous, in which it bears some resemblance to the *purpura* of the ancients, which kept its colour exceedingly well.

Black consists either of *lamp-black*, ivory-black, blue-black, or Indian-ink. The first is the finest of what are called the soot-blacks, and is more used than any other. The dregs and pieces of bark left after straining the turpentine are burnt in a low oven, from which the smoke is conveyed through a long passage into a square chamber, having an opening on the top, on which is a large sack made of thin woollen stuff: the soot, or lamp-black, concretes partly in the chamber, from whence it is swept out once in two or three days. *Ivory-black* is prepared from ivory or bones burnt in a close vessel. An opaque deep black for water-colours, is made by grinding ivory-black with gum water on a marble flab, or with size. *Blue-black* is said to be prepared from the burnt stalks and tendrils of the vine.

Indian-ink is an excellent black for water colours. There is another very agreeable and useful black called Keating's-black, which may be had at most colour shops ready prepared.

The *flake-white* and *white*-lead are, properly speaking, the same colours. These are the only whites that can be used in oil, all the rest being transparent unless they are laid on with water. *Spanish white* is only a finely prepared chalk; and *Pearl-white* is made from oyster shells. The magistery of bismuth is apt to turn black, as are also flake-white, and white-lead, when used as water colours. The best white for painting in water colours is flake-white; but some recommend a white made of pearl and oyster shells brought to an impalpable powder, called pearl white, which will mix well with any colour.

The *red* colours used in painting and drawing are of two sorts; viz. those which incline to the purple, and such as are of a full scarlet, and tend rather to the orange. The first are carmine, lake, rose-pink, red-ochre, and Venetian-red. The second are vermilion, red-lead, scarlet-ochre, common Indian red, Spanish brown, and terra di Sienna, burnt. *Carmine* is the brightest and most beautiful red colour known at present; and the best comes from France. *Lake* differs from it in being capable of mixture with oil; which carmine is not, unless with great difficulty. The former is also much more inclined to purple than carmine. This last quality, however, is reckoned a defect; and accordingly, the more that lake approaches to the scarlet or true crimson, the more it is valued. On dropping a solution of tin into an aqueous tincture of brazil-wood, a beautiful precipitate falls, of a purplish crimson colour. This may be very well substituted in place of the dearer lakes on many occasions. *Rose-pink* inclines more to purple than scarlet. It seems to be made of chalk, coloured with a decoction of brazil-wood: but it is exceedingly perishable. *Red ochre* and *Venetian red* differ in nothing from the calces of iron when made to incline either to a purple or scarlet, by the manner in which the calcination is performed. A liquid colour of a very good crimson may be made as follows: In twelve ounces of pale stale beer, boil one ounce of ground Brazil wood, till the colour is as strong as you desire; strain it through a linen cloth, and bottle it up for use.

The only true *orange* colours are red orpiment and orange lake. The first is a sublimate formed of arsenic and sulphur; the

other may be prepared from turmeric infused in spirit of wine, having its colour struck upon calx of tin, and brightened by a solution of that metal. All the shades of orange, however, may be extemporaneously prepared by mixing red and yellow together, in due proportions. In vermilion and gamboge, the latter most predominant, you are presented with a pleasant and serviceable colour, for painting lilies, and all other orange colour flowers.

King's yellow is an arsenical preparation. Its colour is exceedingly beautiful, but very apt to fade; on which account, and its great price, it is seldom used. *Naples yellow* has lead for its basis. It is therefore apt to turn black and lose its colour, which makes it the less valuable. It is nevertheless used instead of king's yellow, on account of its cheapness. *Dutch pink* is said to be prepared by striking the colour of yellow berries upon alumine: *Masticot* is prepared by calcining white-lead till it assumes a yellowish colour. It is not apt to change, but the colour is so dull that it is seldom used either in oil painting or water drawings. Common *orpiment* is a pretty bright greenish yellow, prepared by subliming arsenic with sulphur. It has a nauseous smell; and it does not keep its colour for any length of time. Gamboge is, beyond doubt, one of the mellowest colours nature has produced, and wants neither gumming nor grinding, for the most agreeable and pleasant yellow tints. Gall stone is a very rich deep yellow, tending towards a brown; it is exceedingly useful in many cases, needs but little gumming or grinding, and works free, but will not shade itself. Yellow ochre makes a very good pale yellow; and, being ground with gum water, will prove extremely useful. Another very useful yellow is made by infusing the plant celandine in clear water, gently pressing it, adding to the liquor some alum water, letting it boil. The virtues of the yellow extracted from French berries is well known; and you may likewise make a yellow, by infusing saffron in pure water, from the roots of ginger; which make a good green, when mixed with transparent verdigrise.

The only simple *green* colour that has a tolerable degree of brightness is verdigrise, or at least certain preparations of it. It is improved in colour, though not in durability, by dissolution and crystallization in distilled vinegar: in which state it is called *distilled verdigrise*. A more durable water colour is made by dissolving the verdigrise in crystals of tartar: but in oil this is found to be equally fugitive

with the verdigrise itself. Compound greens are either made of Prussian or some other blue, mixed with yellow. *Sap green* is a simple colour; it is a colour extremely serviceable, and the best green for water colours, being of a gummy substance, and easily diluting in water. It produces an endless variety of tints, and has the advantage of shading itself. Another green sometimes used is called *terre verte*, which is a native earth, probably impregnated with copper. It is of a blueish green colour. Much of that tint called *sea-green* is made by mixing indigo and sap-green, which may be made darker or lighter, by adding more or less indigo: it is a very serviceable colour, easily worked, and productive of many tints. Another green is made with indigo and gamboge, well ground together, extremely useful in painting of trees, grass, vegetables, &c. With the addition of sap-green, it is very serviceable in flowers, and in the shading of garments. A transparent green is made by mixing verdigrise and yellow to various tints, by leaving either predominant.

Of *blue* colours the *ultramarine* is the finest, but its great price prevents it from being much used. It is a preparation from lapis lazuli, and is an exceeding bright colour, and never fades with whatever substance it is mixed. Prussian blue, is excellent when it is of the best quality and is deep, bright, and not inclined to purple. It ought to be tried by a mixture of white lead, as the brightness of the colour will appear much more when diluted than when concentrated in the lumps of the blue itself. Blue bice is a colour of a very good body, and flows very agreeably in the pencil. Blue verditer is a very bright pleasant blue, of a good body, and works well when ground with gum-water, and is mostly used for skies or garments. Saunders' blue is extremely serviceable in the shading of ultramarine, where no very dark shades appear. Litmose is also a very agreeable blue. Indigo is the darkest blue, is a soft free colour, and runs very freely in the pencil: it requires to be well washed and ground; and may be made darker or lighter, by the addition of more or less gum-water. Antwerp blue is a very serviceable transparent colour. It works well, and may be made lighter or darker at pleasure; with the exception of Prussian blue and indigo, it might supercede all other blue colours named above.

Purple colour is made of the substance usually called *colcothar* of vitriol. Beautiful purple lake may be prepared from logwood. Take

eight ounces of logwood, a pint of rain-water, and an ounce of alum; infuse it well over a slow fire, in a well-glazed pan or pipkin, for about twenty-four hours; add a quarter of an ounce of gum-arabic; let it stand for a week; strain it through a piece of fine cloth. Or make a redder purple, by adding to one ounce of the above, four ounces of Brazil-wood, and a pint of stale beer, boiling it till the liquor is as strong as you desire. It may be made darker, by adding more logwood. The richest purple is made by blending carmine and Prussian-blue, or indigo, to what shade you please.

Burnt and unburnt terra de Sienna are the warmest *browns* for front grounds, for dead leaves, &c. Bistre is a good and serviceable colour, and the best sort is very bright and close. It is a colour difficult to work of itself; mix, therefore, a little Spanish licorice with it, which will mellow and take off its harshness. The higher it is gummed, the better it is for use. Spanish licorice is productive of a variety of brown tints, of very agreeable colour. A brown mixture is made by incorporating sap-green and carmine, which is of an extraordinary soft nature; and is a colour extremely serviceable. By blending vermilion and bistre thoroughly, you produce a brown of excellent quality.

182. Lay your colours on but thinly at first, deepening and mellowing them by degrees, as you see occasion. The quicker you lay them on, the evener and cleaner your drawing will appear. Take care to preserve all your colours from dust; and before you use them, wipe your shells and palette every time they are used.

183. For face-painting, mix up a little light carnation, or flesh-colour, with gum-water, in a shell by itself. If it be for a fair complexion, mix vermilion and flake-white together; and for a swarthy one, add to the former a little masticot or English ochre, or both. Let your flesh-colour be always lighter than the complexion you would paint, for by working on it you may bring it to its true colour. In a large shell, or upon your palette, lay your different shades of flesh-colour, at a convenient distance from each other, and always have ready a sufficient quantity of white to lighten your shadows. But

for water colouring use first a faint wash of vermilion or Indian red all over the part which is to be flesh colour, touching the cheeks with a mixture of vermilion and lake, and the lips with vermilion only. For a dark complexion, add a little burnt sienna.

184. For cheeks and lips, in painting, use a mixture of lake and carmine, as occasion requires; and for blue tints (as the eyes and veins) indigo, or ultramarine, and white.

185. For grey faint shadows, use white, English ochre, sometimes masticot; for deep shadows, white, English ochre, and umber; for darker shadows, lake and pink, which make a good fleshy shadow.

186. In colouring landscapes, at first only lay dead colours, agreeably to the subject, smooth all over the piece, leaving no part uncovered, using a masterly freedom.

187. In some places lay on strong touches, and in those places bring your work up together to an equal roundness and strength; tempering and sweetening your colours with a sharper pencil than the first, that no harsh edges be left, but that all your shadows may be dispersed, soft, and smooth, gliding gently, as it were, one in another.

Obs. To produce a great or striking light on a mass of colours, or restore a light destroyed, pass a pencil with clean water over the part; when the water is soaked into the colour, it may be dried with a cloth, and the colour removed with a piece of bread.

188. Having laid your dead colours, begin first with the lightest parts, as the sky, sun-beams, &c. then the yellowish beams (which may be done with masticot); next the blueness of the sky, with ultramarine, Antwerp blue, or smalt. For purple clouds a little lake over the blue. Make your colours deeper as they go upwards from the horizon, except in tempestuous skies. The tops of distant mountains must be worked so faint, that they may seem to lose themselves in air.

189. Bring your colours forward as your distance decreases; painting your first ground next the horizon downwards

of a blueish sea-green, and as you advance forwards, of a reddish or darker green, till you come to the fore-ground itself, which, as it is to be the darkest part of all, do with dark green, shaded with a dark brown or yellow; which rule of shadow will also serve for the trees on each respective ground.

190. In colouring trees, boughs, and branches, touch in all the dark shades first, raising the lighter leaves above the darker, by adding more yellow to your dark green, which may be made with gamboge and Prussian blue or indigo; for the uppermost of all, which are to be done last, touch the extremities of the leaves with a little light green, and set off the darkest shadows with sap-green and indigo.

191. The most useful colours for landscapes are, LAKE, VERMILION, BURNT OCHRE, GAMBOGE, INDIGO, ANTWERP BLUE, LIGHT RED, SEPPIA, PRUSSIAN BLUE, and TERRA DE SIENNA, burnt and unburnt.

192. Skies are tinted with indigo, or Antwerp blue, and the distant hills may also receive a finish wash of the same colour. Buildings, ground, and roads should be tinted with ochre. The bushes and grass may be forwarded with a tint of gamboge. The distances may be heightened with a tint of lake, and the dark shadows of the buildings may be tinted with seppia.

Obs. A simple tint is produced by one cake reduced with water to the tint required. A compound tint is a mixture of colours, as lake and indigo for purple; and blue and yellow for green. The simple are more clear than the compound; and they are unfavoured in effect by being contrasted with contrary compounds.

193. In retiring hills tint the whole with weak blue; then the nearer ones with indigo and lake, then add a little gamboge to the next, keeping one subordinate to the other, the most distant being lost in the aerial tints. Clouds should be tinted with seppia. Opposing masses of trees should be tinted with seppia and indigo, and distant trees with grey, the lights

warmed with gamboge and ochre, and their shades deepened with indigo. Force is acquired by adding seppia with indigo to the cold parts, and seppia with lake to the glowing parts. Breadth of light is obtained by destroying the scattered lights with greys.

194. Tint with ochre to give warmth to the whole, and shadow the ground with tints of ochre and sepia. Mark the breaks of buildings, the shades and dark trees with ochre, indigo, and lake. Wash the masses in the distances with indigo and lake. Finish the trees with indigo, ochre, and gamboge, forming green; and give a glow to the lights with a red formed of ochre and gamboge or burnt terra de sienna. Tints of indigo always reduce too abrupt glows, and those of ochre confer warmth when required.

Obs. 1. *To make Gum Water.*—Dissolve one ounce of pure white gum-arabic, and half an ounce of double-refined sugar, in a quart of spring water; strain it through a fine sieve, or a piece of muslin, and bottle it off for use, keeping it free from dust. With this water you may temper most of your colours; using such a quantity that, being touched when dry, the colour will not come off. If the colour shine, there is too much gum in it.

Obs. 2. *To make Liquid Gold.*—Grind the finest leaf-gold with strong gum-water, very fine, adding, as you grind it, more gum-water, as you see necessary. When you have ground it as fine as you can, wash it in a large shell; then temper it with a little mercury-sublimate, bind it in the shell with a little dissolved gum, shake and spread it equally all over the shell, and use it with fair water only; and to make liquid silver follow the same process with that for liquid gold, observing, in the using it, to temper it with glare of eggs instead of water.

Obs. 3. *To keep the colours from sinking.*—Boil four ounces of roch-alum in a pint of spring water, till it is thoroughly dissolved; then filter it through brown paper, and keep it for use; and before you lay on your colours, take a sponge, and wet the back of your paper with this water while it is hot.

Obs. 4. *To cause your colours to flow smooth.*—Dip your pencil in ox gall and mix it with any colour you have prepared. Be careful, however, not to put too much into the finer colours, such as carmine, &c. as it will deaden them.

OF FRUITS, FLOWERS, AND TREES.

195. Fruits are the most simple in their form of any natural bodies. They generally depart a little in their outlines from the regular circle and oval. Some partake of the form of an oblate spheroid, as an orange; others resemble a prolate spheroid, as the lemon, melon, &c.; and others are nearly a regular spheroid, as cherries, grapes, &c. Some partake of a double form, being protruded at one end, as the pear. Consequently all these are easily imitated, by first drawing the outline, and shading them with two or three shades of Indian ink; three shades being in general sufficient, at the most.

196. Flowers are the next which should engage the attention of the student: these form a very pleasing part of his practice; and afford sufficient exercise for his pencil, in delineating their various and complicated forms. It need hardly be observed, that in drawing these, the outline is first to be described, next the principal divisions, and afterwards the less divisions, and inner parts. Flowers in general require more care and attention in shading than fruits, being composed of several different parts. They are so various in the form of their general outlines as to admit of no rule. The learner must acquire a knowledge of their forms from imitating good copies thereof, or drawing them from nature; the former method must however be pursued at first, as the different shades are more accurately described, or at least more apparent to his eye on a plain surface, than in the objects themselves.

197. Trees form a useful, and, in landscape, an essential

part of drawing: these, though at first view to a learner they may appear somewhat difficult, are nevertheless very simple, and easily imitated; the foliage, which appears so difficult to describe, is no more than a number of small irregular angles, drawn with little or no order, and filled with two or three different shades of ink, though in general two are suffi cient. But birds, quadrupeds, fishes, reptiles, insects, &c. it may be observed, once for all, that the outline is to be described first; beginning with the forehead, and drawing the nose, upper and under jaw, and part of the throat; then proceed to describe the ears, neck, back, and rump; after which finish the throat, and draw the breast, legs, belly, and all the other parts. Having attained the outline, draw the smaller parts, which do not fall on the outline, as the eyes, nostrils, appearances of the muscles, &c. Lastly, give the figure its proper shades, according to the copy or original. In drawing a bird or quadruped, it is generally expected, and always increases the effect, to have a small piece of landscape with the figure, by way of ornament, which must always be suitable to the nature of the animal, and natural to the country: thus an eagle may be described upon a rock; a squirrel in or near a tree; a horse in a pasture, &c.

OF COLOURING FRUIT, &c.

198. *Apples.*—Thin masticot mixed with verdigrise, shaded with brown-ochre; give them a bloom with lake, heightened with masticot.

Pears.—Masticot, deepened and mellowed with brown-ochre; the bloom the same as the apple.

Cherries.—Vermilion and lake, shaded with carmine, heightened with vermilion.

Strawberries.—White; draw it over with vermilion and lake, shaded with fine lake, heightened with red-lead and masticot mixed, and after with white; stipple them with white and thin lake only.

Blue Grapes.—Dark purple, shaded with blue; the bloom bice.

White Grapes.—A mixture of verdigrise and masticot, shaded with thin verdigrise.

Peaches.—Thin masticot, shaded with brown-ochre; the bloom, lake laid on thin and transparent.

OF FLOWERS.

199. *Auriculas.*—A tender wash of gamboge, shaded with sap-green and carmine blended together. Round the centre leave a broad white space, which shade with Indian ink and sap-green mixed. Stipple the gamboge with a purple extracted from logwood; the cup in the inside strong yellow, shaded with Dutch pink or gall-stone; stipple it with white, darkening the white gradually with Indian-ink as the shade increases.

Anemones.—A thin wash of gamboge, shaded with bistre, or carmine and sap-green blended together; the stripes carmine, shaded with the same; indigo in the darkest parts, or stipple with it; the leaves sap-green, shaded with indigo and French berries; the stalk brown.

Yellow Crown Imperials.—A thin wash of gamboge; upon that, another of washed red-lead, shaded with carmine; the leaves sap-green, shaded with indigo and French berries.

Orange Crown Imperials.—A thin wash of red-lead; the light shades carmine; the dark, vermilion and bistre mixed; the seed the same as the flower. The leaves and stalks as the preceding.

Double Hollyhocks.—A slight wash of carmine, preserving the white paper for heightening; hatch with carmine; the darker shades sap-green; the bloom pale liquid purple; but in the buds make no use of purple. The stalks and leaves begin and finish with sap-green.

Honey-Suckles.—The inside of the petals white, shaded with sap-green, or masticot, shaded with sap-green, or gamboge and bistre; which insides are to be shewn by curling the leaves back at the ends, or splitting them: the outsides, a thin wash of carmine and lake mixed, shaded with carmine; indigo for the darkest shades. It is to be observed, that some of the flowers, growing on the same stalk, are inclinable to purple, others to carmine: the style and buttons seen at the ends of the flower are of a faint green. The stalks sap-green and carmine; the leaves sap-green, shaded with indigo and French berries.

Blue Bell Hyacinths.—Ultramarine, or verditer; be careful to put in your first hatches very free and soft; shaded with Prussian blue in the same manner; for the darkest, indigo. The leaves and stalks as orange-lilies.

Double Hyacinths.—White, shaded with indigo, Indian-ink, and a very little sap-green; for those with a crimson blush, wash a faint tinge of carmine, leaving in the white towards the top, strengthening it towards the bottom. The leaves and stalks Prussian blue and sap-green, shaded with sap-green and indigo.

Jessamines.—White, shaded with Indian-ink and sap-green blended together, and worked extremely soft; for the darkest shades add more Indian-ink; may also, in a few places, add some soft tints of French berries, at the backs of some of the flowers, and others entirely yellow. The leaves and stalks mix sap-green, verdigrise, and a little indigo, adding more indigo for the darkest shades.

Polyanthuses.—The edges and cup pure gamboge, shaded

with gall-stone; marble the leaves with Prussian blue and carmine mixed; wash the flowers at the back with carmine and a little lake, shaded with carmine and sap-green.

Passion Flowers.—The petals white, shaded with sap-green and Indian-ink, mixed; the treads are ranged in such order as to form three circles, each of a different colour: the first, or outer one, is blue verditer, shaded with Prussian blue; the second, white, to be expressed by carrying on the stroke with flake white; the space between the strokes, indigo and Indian-ink; the third circle, reddish purple, by blending carmine and Prussian blue together. The inside of the five buttons yellow, as the centre of the flower; the other parts, which project from the centre, are light green, those three from the top excepted, which are blueish purple. The leaves French berries and indigo; for the shades add a little Indian-ink; the tendrils and stalks, sap-green and carmine.

Sweet-scented Peas.—The blossoms are composed of red and purple leaves; the red begun and finished as the mundi rose; for purple ones, a thin wash of liquid purple; for the darker shades, a mixture of carmine and Prussian blue finished with indigo. The leaves and stalks, a mixture of gamboge and sap-green, shaded with sap-green alone.

Ranunculuses.—A fine wash of red-lead, striped with carmine, finished with carmine and sap-green mixed; the seeds indigo or Indian-ink, stippled with white. The leaves and stalks as fritillaries.

Roses.—A light tint of pure carmine, over which another equally light of Prussian blue, which will give the flowers a tint of that bloom which appears in nature; proceed with darker shades of carmine of the best sort; in the darkest parts of the flower add a little indigo, which will give a roundness and body to your work; if the seeds are seen, lay on some gamboge, shaded with gall-stone; the upper side of the leaves sap-green, shaded with indigo and French berries mixed; the

under part indigo, and sap-green mixed, shaded with the same. The stalks brown, made of sap-green and carmine, shaded with indigo.

Rose Buds.—We shall not here undertake to describe the different colours and various tints with which nature has furnished us. A pale wash of carmine, shaded with a stronger wash of the same; let the hatchings be extremely tender, preserving that transparency and sweetness the flower has by nature. The stalks and leaves begin and finish with sap-green, after which a slight wash of carmine.

Guelder Roses.—White, shaded with Indian ink and sap green mixed, keeping a proper gradation of shades. The leaves as crown imperials; the stalk bistre, shaded with Indian-ink, so as to express wood.

Sun Flowers.—There are only two sorts, the common sunflower, and the same improved: for the first, a slight wash of carmine, deepen that with another; shaded with vermillion, carmine, and bistre, mixed, finish the deepest shades with the same, being careful to relieve the flower, making it look round; the seeds shade the same as the flower, the darkest much deeper; the seeds on the light side heighten, stippling them with flake-white, washed over with gamboge very lightly; the lights in the same manner. The leaves and stalks sap-green and gamboge mixed, finished with sap-green alone.

Single Stocks.—A thin wash of carmine; proceed with a stronger layer of the same; finish with sap-green and carmine mixed; shade round the seeds sap-green. The leaves and stalks gamboge, white, and sap-green; shaded with a tint of indigo, finished with a darker of the same.

Double Stocks.—There are of these flowers different colours; some are a purplish crimson only, others mottled with crimson and white, and some are all white. For the crimson a little Prussian blue and carmine mixed: for the mottled ones use the same colour, stipple them with flake white: the white

sort shade with Indian ink and sap-green mixed. The leaves and stalks pleasant green, inclining to a white.

Tulips.—Begin with striping with white, well blended with carmine; add some very tender stripes with gamboge, heightened with carmine; for the darkest shades a little sap-green mixed with it: shade the yellow stripes with the same mixture; the darkest shade vermilion and bistre; or, begin by striping, with gamboge; proceed with purple stripes; in doing of which be careful to preserve the white ones, which will give an agreeable effect; the darker shades liquid purple, to which (if requisite) add a little Prussian blue. The leaves and stalks sap-green, shaded with the same.

Wall Flowers.—For the common sort, gamboge, shaded with gall-stone. But that sort most esteemed by the florist, is called the bloody-wall. The outer petals gamboge, tinged with a little of the purple of logwood: the inner petals red-lead, finished with carmine; the cup purplish brown. The leaves and stalks blueish green; to be worked as those of the flowers of the same colour.

Double White Narcissus.—Flake-white; the first shade sap-green, and a little Indian-ink, adding more Indian-ink in the darker shades; tinge the bottom of each petal green; the narrow edge that surrounds a tuft of small petals in the centre, carmine. The stalks and leaves the same as Irises. The sheath at the bottom pale brown.

Obs. Particular colours seem to be appropriated to particular parts of plants. Thus, *white* is most common in roots, sweet berries, and the petals of spring flowers. *Water colour*, in the filaments and styles. *Black*, in the roots and seeds; rarely in the seed vessel, and scarce ever to be found in the petals. *Yellow* is frequently in the antheræ or tops of the stamina; as likewise in the petals of autumnal flowers, and the compound legulated flowers of Linnæus. *Red* is common in the petals of summer flowers, and the acid fruits. *Blue* and *violet*-colour, in the petals. *Green*, in the leaves and calyx, but

rarely in the petals. In the interchanging of colours, which in plants is found to depend upon differences in heat, climate, soil, and culture, a sort of elective attraction is observed to take place. Thus, red is more easily changed into white and blue: blue into white and yellow; yellow into white; and white into purple. A red colour is often changed into a white, in the flowers of heath, mother of thyme, betony, pink, viscous campion, *cucubalus*, trefoil, orchis, foxglove, thistle, cudweed, saw-wort, rose, poppy, fumitory, and geranium. Red passes into blue in pimpernel. Blue is changed into white in bell-flower, greek-valerian, bindweed, columbine, violet, vetch, milk-wort, goat's rue, viper's buglos, comfrey, borage, hyssop, dragon's head, scabious, blue-bottle, and succory. Blue is changed into yellow in crocus. Yellow passes easily into white in melilot, agrimony, mullein, tulip, *blattaria*, or moth-mullein, and corn marigold. White is changed into purple in wood-sorrel, thorn-apple, peas, and daisy. As flowers gradually open and are exposed to the air, they throw off their old colour, and acquire a new one. In fact, no flower has its proper colour till it has fully expanded. Many flowers change their colours thrice successively; thus, the very young buds of lady's looking-glass, buglos, and the like, are all white; the larger buds purple, or murrey; and the open flowers blue. A yellow colour generally indicates a bitter taste; as in gentian, aloe, celandine, turmeric, and other yellow flowers. Red indicates an acid or sour taste; as in cranberries, barberries, currants, raspberries, mulberries, cherries; the fruit of the rose, sea-buckthorn, and service-tree. Herbs that are turned towards autumn, have likewise a sour taste; as sorrel, wood-sorrel, and bloody dock. Green indicates a crude alkaline taste, as in leaves and unripe fruits. A pale colour denotes an insipid taste, as in endive, asparagus, and lettuce. White promises a sweet luscious taste; as in white currants and plums, sweet apples, &c. Lastly, black indicates a harsh, nauseous, disagreeable taste; as in the berries of deadly night-shade, myrtle-leaved sumach, herb-christopher, and others; many of which are not only unpleasant to the taste, but pernicious and deadly in their effects.

OF HORSES AND OTHER ANIMALS.

200. *Chesnut-Brown.*—Red-ochre and black mixed together, shaded with black, heightened with red-ochre and white.

Grey.—Black and white mixed, shaded with black, heightened with white.

White.—Black and white mixed, shaded with black, white, and bistre; heightened with pure water.

Black.—Black, lightly laid on, shaded with Keating's black.

Sheep.—White, shaded with Spanish licorice.

Hogs.—Brown-ochre, shaded with Keating's black and bistre, heightened with masticot.

Lions.—Colour much the same as hogs, adding lake in the ground colour.

Bears.—Brown-ochre, red-ochre, and black, mixed, shaded with bistre and ivory black.

Wolves.—Spanish licorice and black, shaded with black.

Asses.—Black and white, mixed; or add a little brown-ochre, shaded with black.

Elephants.—Black and white, and Spanish licorice, mixed; shaded with black and bistre; the inner part of the nose, vermilion and white, shaded with black.

Monkies, &c.—Dutch pink and black, heightened with masticot and white: the face black and bistre mixed, as also their feet and below their bellies, shaded with black and pink, mixed with a little brown-ochre.

Stags.—Brown-ochre, shaded with bistre towards the back; the neck and belly white, the mouth and ears inclining to red, the hoofs black, and legs shaded with black.

BIRDS.

201. *Eagles.*—Black and brown, shaded with indigo; the feathers heightened with brown-ochre and white; the beak and claws saffron, shaded with bistre; the eyes with vermilion, heightened with masticot, or saffron shaded with vermilion.

Turkeys.—Both male and female, the back black and white mixed, gradually shaded off to a white under the belly, sprinkled and shaded with black.

Swans.—White, shaded with black; the legs and bill black; the eyes yellow, a ball in the midst.

Geese.—Ceruse, shaded with black; the legs black, the bill red.

Pheasants.—White and black mixed; the eyes like those of the falcon; the legs Dutch pink, shaded with black.

Owls.—Ochre mixed with white in different shades; the legs yellow-ochre.

OF ENLARGING AND CONTRACTING DRAWINGS.

202. There are several methods of varying the size of a drawing from the original.

1. By the pentograph, an instrument which properly belongs to the mathematical and mechanical parts of drawing, and a very unwieldly and improper instrument for an artist of genius.

2. The second method of *reducing* a figure or drawing is by the help of a camera obscura. A piece of landscape, with all the objects therein, as men, trees, houses, cattle, &c., is very clearly and accurately represented from nature itself, on

the glass of this instrument or on a sheet of white paper, placed in a proper situation, according to the form of the instrument, and method of using it.

3. The most general method of enlarging and contracting, is to divide the original piece and copy into a certain number of squares, or parallelograms, by perpendicular and transverse lines, making as many of each in the original as in the space designed for the copy, and numbering the corresponding lines alike. Then observe through what parts of each square the different lines run in the original, and draw similar lines through the same parts of the corresponding squares in the copy.

Obs. After all, the most useful exercise which the student can pursue is, to vary the size by his eye, and never to resort to mechanical means except where mechanical precision is required.

Choice of the Subject.

" Some lofty theme let judgment first supply,
Supremely fraught with grace and majesty;
For fancy copious, free to every charm
That lines can circumscribe, or colours warm;
Still happier, if that artful theme dispense
A poignant moral and instructive sense.

Sketching.

Then let the virgin canvas smooth expand,
To claim the sketch and tempt the artist's hand:

Beauty of Invention.

Then, bold INVENTION, all thy powers diffuse,
Of all thy sisters thou the noblest Muse:
Thee, every art, thee, every grace inspires,
Thee, Phœbus fills with all his brightest fires.

Disposition.

Choose such judicious force of shade and light
As suits the theme, and satisfies the sight;
Weigh part with part, and, with prophetic eye,
The future power of all thy tints descry;
And those, those only on the canvas place,
Whose lines are social, whose effect is grace.

Truth.

Vivid and faithful to the historic page,
Express the customs, manners, forms, and age;

Pertinence.

Nor paint conspicuous on the foremost plain
Whate'er is false, impertinent, or vain;
But, like the Tragic Muse, thy lustre throw
Where the chief action claims its warmest glow.

Grace.

This rare, this arduous task no rules can teach,
No skill'd preceptor point, no practice reach;
'Tis taste, 'tis genius, 'tis the heav'nly ray
Prometheus ravish'd from the car of day.

MASON'S FRESNOY.

Glossary

OF TERMS USED IN DRAWING AND PAINTING.

AERIAL PERSPECTIVE is a gradation of the tones of colours, which throws off the distances of grounds and objects; and which judicious artists practice, by diffusing a kind of thin vapour over them, that deceives the eye agreeably. It shews the diminution of the colours of objects, in proportion as they recede from the eye, by the interposition of the air between the eye and the object, as if the object was seen through a column of air.

ANTIQUE. By this term are implied and understood, such paintings and sculptures as were made at that period of time, when those arts were in their greatest perfection among the ancient Greeks and Romans, from the age of Pericles to that of Caracalla. The term *Antique* is more particularly applied to the sculptures of the period before mentioned; such as statues, basso-relievos, medals, intaglios, or engraved stones. However, all those remains of antiquity are not equally excellent or good: but even in those that are indifferent, there is a certain degree of beauty which distinguishes them from the works of the moderns. But it is the most perfect of the works of the ancient great masters which are to be the objects of our taste and imitation, as they continue still to be the objects of our wonder and astonishment.

ATTITUDE, in painting, is the posture or disposition of the limbs and members of a figure, by which we discover the action in which it is engaged, and the very sentiment supposed to be in the mind of the person represented. It comprehends all the motions of the body, and requires a perfect knowledge of ponderation, and whatever refers to the centre of gravity; but whatsoever attitude be given to any figure, that attitude must shew the beautiful parts, as much as the subject will permit, let the subject be what it will. It must, besides, have such a turn, as, without departing from probability, or from the character of the figure, may diffuse a beauty over the action. It is allowed, that the choice of fine attitudes constitutes the greatest part of the beauties of grouping.

CASTING OF DRAPERIES. By this term is implied the distribution of the folds; and draperies are said to be well cast, when the folds are distributed in such a manner as to appear rather the result of mere chance, than of art, study, or labour. In that manner or style of painting, which is called the Grand, the folds of the draperies should be great, and as few as possible, because their rich simplicity is more susceptible of great lights. But it is an error to design draperies that are too heavy and cumbersome; for they ought to be suitable to the figures, with a combination of ease and grandeur. Order, contrast, and a variety of stuffs and folds, constitute the elegance of draperies; and diversity of colours in those stuffs contributes extremely to the harmony of the whole in historic compositions.

CHARGE, or CHARGED, is a term used by artists to signify any thing that exceeds; such as exaggerating the outlines, in order to show a superior degree of skill, and by that means exceeding the bounds of a regular simplicity. Yet (De Piles observes) there are charged outlines that please, because they are above the lowliness of ordinary nature, and carry with them an air of freedom, with an idea of a great taste, which deceives most painters, who call such excesses the grand manner. And although, to such persons who have a true idea of correctness, simplicity, and elegance of nature, these excesses may seem superfluous, as they only adulterate the truth, yet one cannot forbear to commend some things that are over-charged, in great works, when the distance from whence they are to be viewed softens them to the eye; or when they are used with such discretion as makes the character of truth more apparent. It is worthy of being remarked, that in the antique statues, which are allowed to be the rule of beauty, nothing appeared charged, nothing affected; nor is there any thing of that kind in the works of those who have always imitated them; as Raphael, Domenichino, Nicolo Poussin, and some others.

CHIARO-SCURO is the art of advantageously distributing the lights and shadows which ought to appear in a picture, as well for the repose and satisfaction of the eye, as for the effect of the whole together. As to the meaning of the word Chiaro (translated clear or transparent), it implies not only any thing exposed to a direct light, but also all such colours as are in their nature luminous. Scuro (translated dark or darkness), not only implies all the shadows directly caused by

the privation of light, but likewise all the colours which are naturally brown; such as, even when they are exposed to the light, maintain an obscurity, and are capable of grouping with the shades of other objects. Of which kind, for instance, are deep velvets, brown stuffs, polished armour, and the like, which preserve their natural or apparent obscurity in any light whatever. By the chiaro-scuro, objects receive more relief, truth, and roundness; and it particularly signifies the great lights, and great shades, which are collected with such industry and judgment as conceals the artifice. The distribution of the objects forms the masses of the chiaro-scuro, when, by an artful management, they are so disposed, that all their lights are together on one side, and their darkness on the other.

CONTOUR, or OUTLINE, is that which terminates and defines a figure; and the great part of the skill of a painter consists in managing the contours judiciously.

CONTRAST is an opposition or difference in the position of two or more figures, contrived to make a variety in painting. Thus, in a group of three figures, when one appears in front, another shews his back, and a third is placed sideways, there is said to be a contrast. A well-conducted contrast is one of the greatest beauties of a painting. It is not only to be observed in the position of the several figures, but also in that of the several members of the same figure. If nature requires painters and sculptors to proportion the parts of their figures, it requires also that they contrast their limbs and their different attitudes. One foot placed like another, or one member extended or depressed like another, excites our disgust; because symmetry deprives us of the pleasures arising from variety, and makes the attitudes appear too frequently the same; as we may observe in Gothic figures, which, by want of that judicious contrast, always resemble each other.

CORRECTNESS is a term which implies a design that is without a defect in its measures and proportions.

COSTUME is an Italian word, which signifies custom or usage; and the term implies, that a painter, in representing some historical passages, action, or event, must not only be exact in describing the particular fact, but he must also represent the scene of action; the country where the action has passed; whether it was at Rome or

Athens; whether at a river or on the sea-shore; in a palace or a field; in a fruitful or a desert country; observing to distinguish, by the dresses, customs, and manners, peculiar to each people, whether they are of one country or the other; whether Greeks, Romans, Jews, or Barbarians.

DESIGN implies the representation of one or more human figures or animals; or some parts or members of either; or a scene taken from nature; a plant, fruit, flower, insect, or piece of drapery, all taken from the life, in order to be inserted in some part of a picture; and in this sense it is called a study. It is also taken for the outline of objects; for the measures and proportions of exterior forms. Design consists of several parts, of which the principal are, correctness, style, character, variety, and perspective.

DISTEMPER is a preparation of colours without oil, only mixed with size, whites of eggs, or any such proper, glutinous, or unctuous substance; with which kind of colour all the ancient pictures, before the year 1410, were painted, as also are the celebrated cartoons of Raphael.

DRYNESS is a term by which artists express the common defect of the early painters in oil, who had but little knowledge of the flowing contours, which so elegantly shew the delicate forms of the limbs, and the insertion of the muscles; the flesh in their colouring appearing hard and stiff, instead of expressing softness and pliancy. The draperies of those early painters, and particularly of the Germans, concealed the limbs of the figures, without truth or elegance of choice; and even in their best masters, the draperies very frequently either demeaned or encumbered the figures.

ELEGANCE in a design, is a manner which embellishes and heightens objects, either as to their form or colour, or both, without destroying or perverting truth. It appears most eminently in the antiques, and next in those painters who have imitated them best, the principal of which is Raphael. De Piles observes, that elegance is not always founded on correctness, as may be evident from the works of Raphael and Correggio; in the latter of whom, notwithstanding his incorrectness of design, his elegance in the taste of it, and in the turn which he has given to his actions, must needs be admired, for he rarely departs from elegance.

EXPRESSION principally consists in representing the human body and all its parts, in the action suitable to it; in exhibiting in the face the several passions proper to the figures, and marking the motions they impress on the other external parts. Frequently, the term Expression is confounded with that of Passion; but the former implies a representation of an object agreeably to its nature and character, and the use or office it is intended to have in the work; and passion, in painting, denotes a motion of the body, accompanied with certain airs of the face, which mark an agitation of soul. So that every passion is an expression, but not every expression a passion.

FRESCO is a kind of painting performed on fresh plaster, or on a wall covered with mortar not quite dry, and with water-colours. The plaster is only to be laid on as the painting proceeds; no more being done at once than the painter can dispatch in a day. The colours, being prepared with water, and applied over plaster quite fresh, become incorporated with the plaster, and retain their beauty for a great length of time.

GRACE principally consists in the turn that a painter gives to his objects, to render them agreeable, even those that are inanimate. It is more seldom found in the face than in the manner; for our manner is produced every moment, and can create surprise. In a word, the woman can be beautiful but one way, yet she can be graceful a thousand. Grace is neither found in constrained, nor in affected manners, but in a certain freedom and ease between the two extremes.

GROTESQUE. This term, which is now familiar among all the lovers of the art of painting, was, by the Italians, appropriated to that peculiar manner of composition and invention, observed among the antique monumental paintings which were discovered in the subterraneous chambers, that had been decorated in the times of the ancient Romans. And as the Italians apply the word *Grotto* to express every kind of cave or grot, all paintings, which were in imitation of the antique designs, discovered in those subterraneous chambers, which for ages had been covered with ruins, are now called *grottesca* or *grotesque;* implying a style, in which the imagination and the wildness of inventive fancy, are principally exerted, without any strict adherence to nature, truth, or probability.

GROUP is the combination or joining of objects in a picture, for

the satisfaction of the eye, and also for its repose. And although a picture may consist of different groups, yet those groups of objects, managed by the chiaro-scuro, should all tend to unity, and one only ought to predominate. That subordination of groups creates that union and harmony which is called the *tout-ensemble*, or the whole together. By a predominant group the eye is agreeably fixed; and, by means of the reposes caused by breadth of lights and shades, neither the effect of the other groups, nor of the subordinate objects, is hindered.

Local Colours are such as faithfully imitate those of a particular object, or such as are natural and proper for each particular object in a picture. And colour is distinguished by the term Local, because the place it fills requires that particular colour, in order to give a greater character of truth to the several colours around it.

Linear Perspective is that which describes, or represents, the position, magnitude, form, &c. of the several lines or contours of objects, and expresses their diminution, in proportion to their distance from the eye.

Manner is that habitude which painters have acquired, not only in the management of the pencil, but also in the principal parts of painting, invention, design, and colouring. It is by the manner in painting that a picture is judged to be by the hand of Titian, Tintoret, Guido, the Caracci, and others. Some masters have had a variety in their manners at different periods of life; and others have so constantly adhered to one manner, that those who have seen even a few of them will immediately know them, and judge of them without any risk of a mistake. The variety observable among artists, in their manner and taste, arises from the manners of the different schools in which they have received their instruction, or of the artists under whom they have studied. Yet there are many instances of great artists, who have divested themselves of that early partiality to a particular manner, and have altered it so effectually, as to fix on one abundantly more refined, and better adapted to their particular genius, by which means they have arrived at excellence. Thus, for instance, Raphael proceeded, and acquired a much more elevated manner, after he had quitted the school of Perugino.

Ordonnance is the arrangement of the figures, in respect of the

whole composition; or particular disposition of figures as to the different groups, masses, contrasts, decorum, and situation.

Outline is that which traces the circumferences of objects in a picture. The outline is to be drawn as thin and fine as possible, so as scarcely to be discerned by the eye; and it ought to be observed, that a correct outline may excite pleasure, even without any colouring, but no colouring can afford equal satisfaction to a judicious eye, if the outline be incorrect; for, no composition, no colouring, can merit praise, where the outline is defective.

Passion, in painting, implies an emotion of the body, attended with certain expressive lines in the face, denoting an agitation of soul.

Pastici is a term by which the Italians distinguish those pictures which cannot be called either originals or copies; being the works of some artists, who have had the skill to imitate the manner of design and colouring of other eminent masters; sometimes borrowing part of their pictures, sometimes imitating their touch, their style of invention, their colouring, or expression. Several painters, of considerable reputation for their own original performances, have made themselves remarkable in this way; but none of them more than David Teniers.

Site, in landscape, signifies the view, prospect, or opening of a country, derived from the Italian word Sito, situation; and it is in use among painters, as being more expressive.

The preceding Elements and Principles of Art are, after all, subordinate to practice, and will chiefly be useful as connected with the diligent copying of the following examples; first, of the given size; then, of a size somewhat enlarged; and then, of a reduced size; so that no difficulty shall afterwards arise in copying Nature itself of any required size.

PLATE I.

THE annexed Plate will be found very useful to the Student.

FIGURE I. represents the way to form an oval.

FIGURE II. describes the names of lines.

FIGURE III. the way to raise a perpendicular from an horizontal, or any other line.

FIGURE IV. the way of shading a round substance, gradually decreasing to a point.

FIGURE V. represents a flat surface.

FIGURE VI. represents a round substance.

FIGURE VII. represents a concavity.

FIGURE I. draw the line A, B, C, fix the compasses at B, and dot it at a A, C; then from B to D, E, then from C to F, then divide F, B, into four equal par and dot the fifth G, extend the compasses from G to C, and strike from C, H, H, then fix it at G, and strike H, H; then the same on the other side of the oval, extend the compasses from H to H, and strike J; then fix the compasses at J, and strike H, H; the same on the other side.

FIGURE II. represents a square; A, A, are perpendicular lines, B, B, horizontal lines, and C, C, diagonal.

FIGURE III. to raise a perpendicular from a given horizontal, divide the line A, B, C; fix the compasses at A, and strike D; then at C, and likewise strike D; then draw a line from B to D.

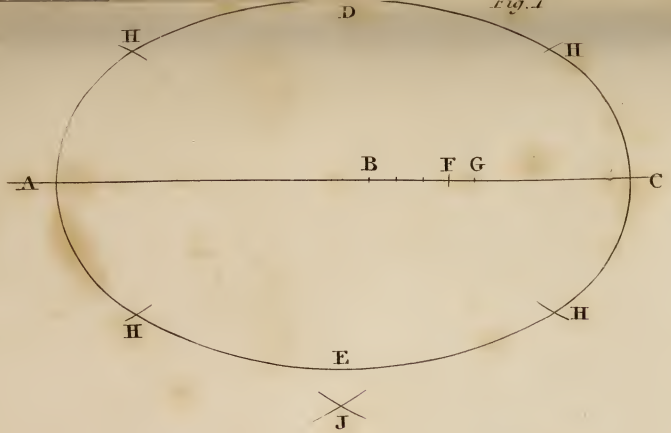


Fig. 1

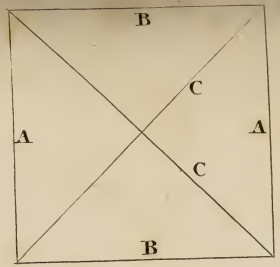
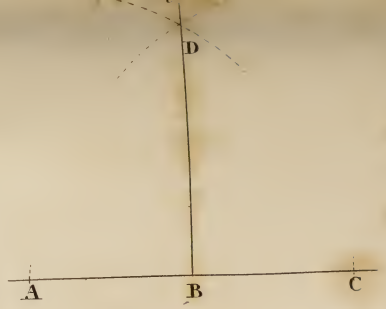


Fig. 2



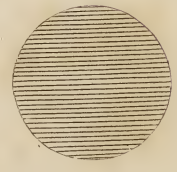


Fig. 3

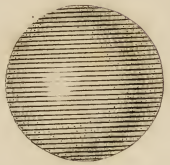


Fig. 6

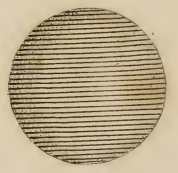
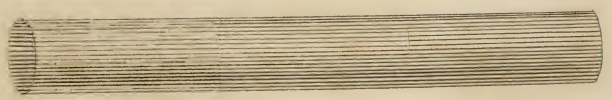
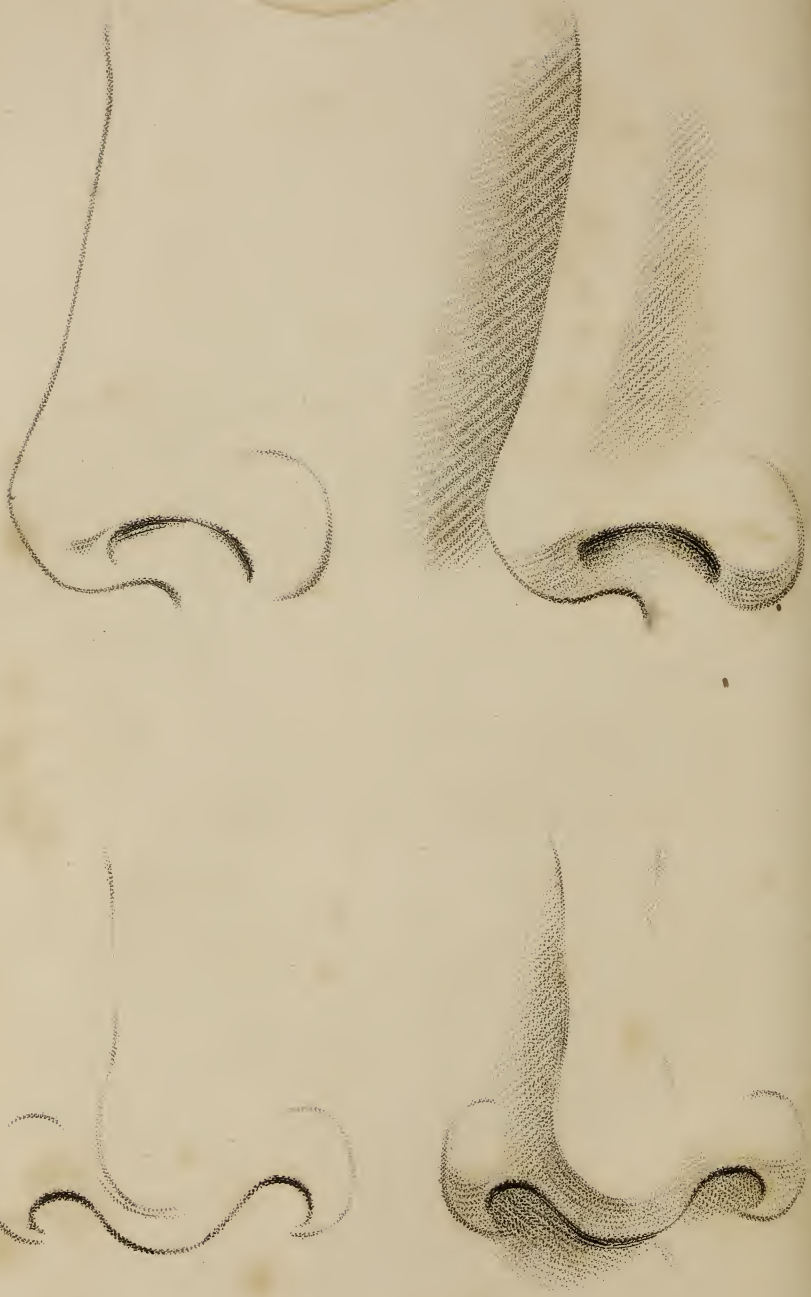


Fig. 7

Fig. 4



Hollow Tube



T. L. Busby sculp

PLATE II.

THE NOSE.

This is the centre feature of the face, and if well proportioned, is exactly the size of the ear.

Profiles. Sketch with black lead pencil, or chalk the outline, of the external form, being particular to place the nostril in its proper situation. When you have obtained a correct outline, touch in with firmness the nostril and under the nose; then the most conspicuous lines; after which, hatch up to the colour of the original, remembering that the most trifling touches are essential to the general effect.

Front. As this is a front view, you will of course draw a line down the centre, as in Plate VI.; then proceed as above described.

PLATE III.

THE EYES.

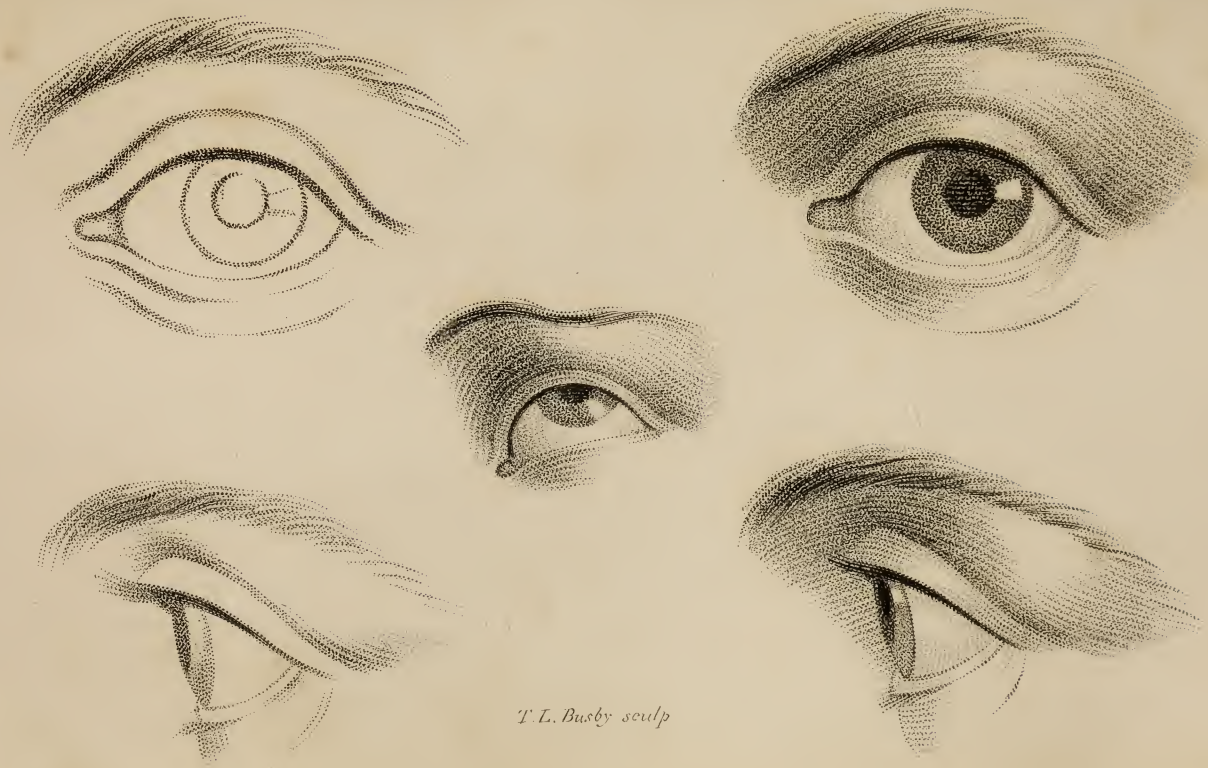
In delineating the human face, this feature should be the first consideration. We present the student with nearly a front view and profile, both in different states. The centre Eye is looking up, and is selected from one of *Le Brun's* Passions.

Front. Sketch in the Eyelid; then the Iris and Pupil; after that the Eyebrow, being particular to place the Ball in its proper place. In making the outline correct, you may find it necessary to rub it down several times with bread, free from grease; then proceed carefully to finish it to its proper effect.

Profile. This Eye is seen in profile, the outline of which is finished rather more than the front. Great care must be taken with the Eye-lashes and Ball.

Looking up. Outline, as before described, being particular to hide part of the Iris and Pupil under the Eyelid.

T. T. Busby sculp



T. L. Busby sculp

T. L. Busby sculp

PLATE IV.

THE NOSE, MOUTH, AND CHIN.

To the left is the Mouth and Chin; next follow the under part of the Nose representing the Nostrils; under that is the bottom part of the Nose, and Mouth with the commencement of the Chin. The lesson to the right is the Mouth and Chin seen in front.

These selections are well adapted to improve the student, and repeated trials should be made of them, till he is completely perfect.

Proceed as described in the last Plate, being particular not to sketch the light parts too strongly; and as the subject to the right is a front view of the Mouth and Chin, the line of course must be drawn in the centre, as described in Plate VI.

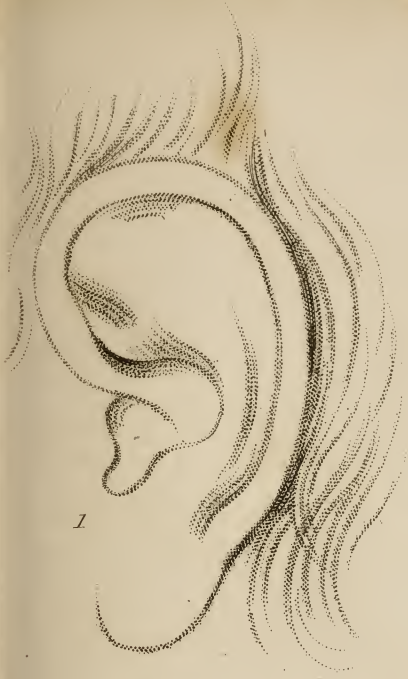
PLATE V.

THE EAR.

The Ear is the most difficult feature to draw in the human Head. The annexed Plate was drawn and engraved from two excellent plaster models of Turnerrelli. This feature is generally much neglected, even by men of talent.

Top Ear. Sketch in the external form of the Ear, remembering that the correct proportion is to be half as broad as long. When the outline is correct, touch in the dark parts with firmness, such as the cavities, and behind the Ears; then proceed to finish to the effect of the original.

Bottom Ear. This Ear is seen sideways and fore-shortened, which makes it of course seem narrower, and above twice as long as it is broad.



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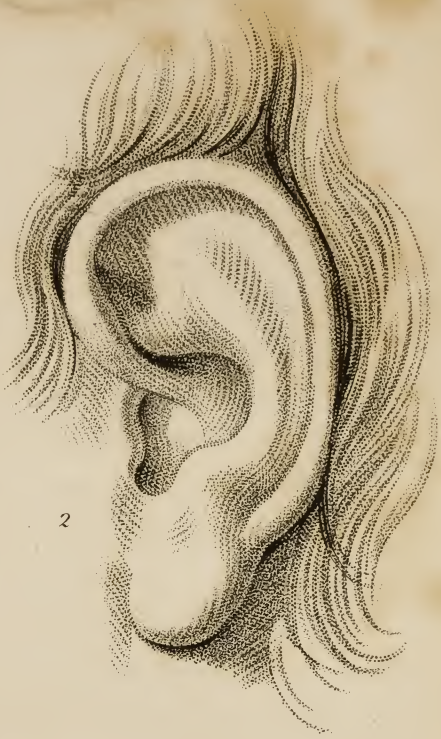

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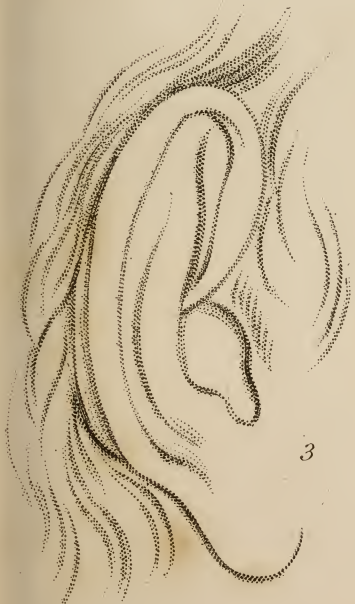

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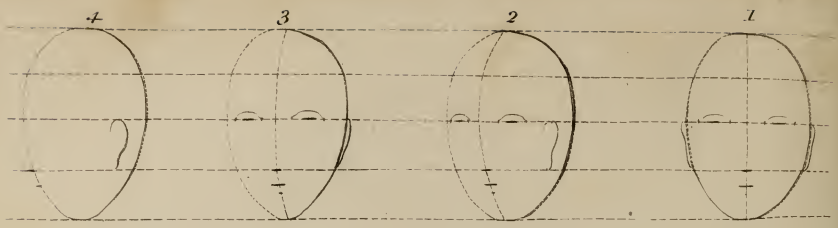
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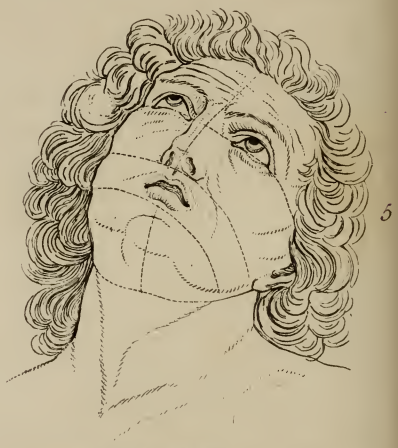
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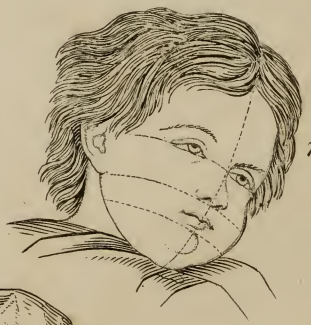
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PLATE VI.

PROPORTIONS OF THE HEAD.

FIGURE I, is a front view of the Head. It is divided lengthways into four equal parts; *first*, the root of the Hair; *second*, the Eyes; *third*, the Nose; and *fourth*, the Mouth and Chin. The Ear is exactly the length of the Nose, the Nose, seen in front, is in the centre of the Head, the distance between the Eyes is the length of the Eye, and the *ball* is one-third of the Eye.

FIGURE II. is a three-quarter face.

FIGURE III. is between a front and three-quarter.

FIGURE IV. is a profile.

FIGURE V. is a Head looking up, and as it is fore-shortened, the Eye must be the guide.

FIGURE VI. is a female Head looking down.

FIGURE VII. is a boy's head. Infantine proportion will be found different from maturity. The lines that cross the face, in this and the others, will sufficiently elucidate it.

FIGURE VIII. is a Female Profile.

FIGURE IX. a Boy looking down.

FIGURE X. is a three-quarter aged Head.

PLATE VII.

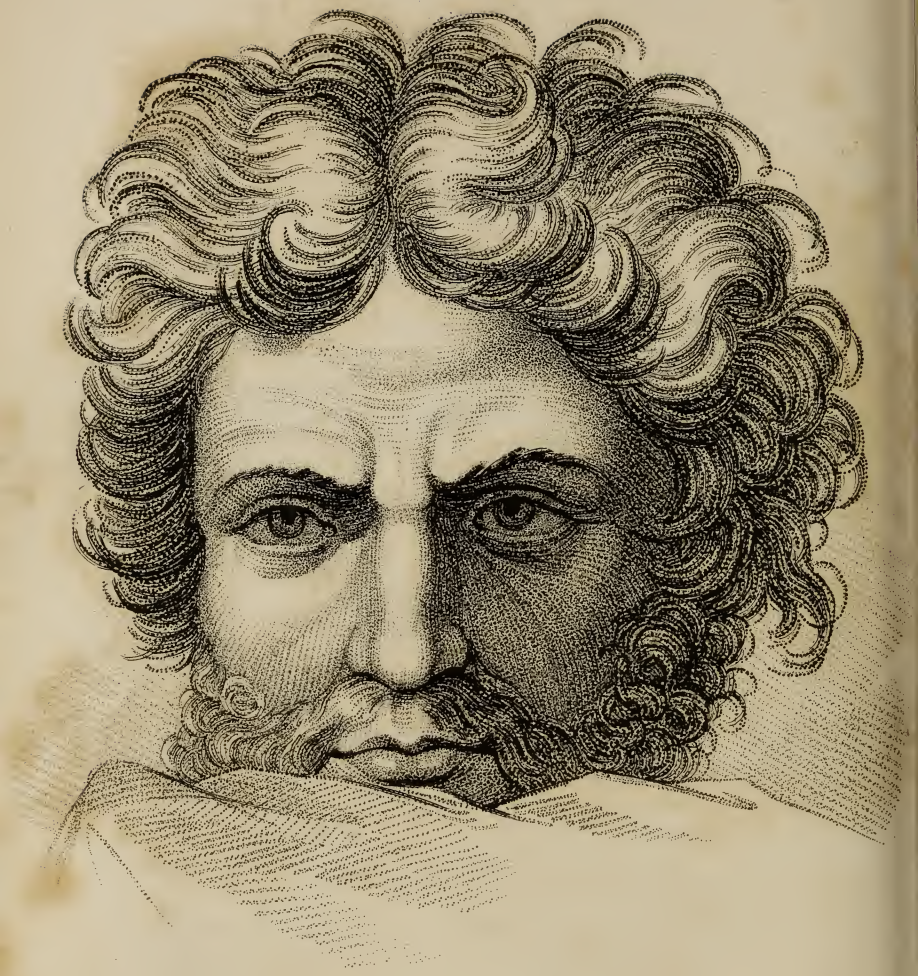
We have here a Head selected from one of the *Cartoons of Raffaelle*, and a sedulous study of it will be of infinite service to the student.

It is looking down, and its thoughtful, pleasing benignity of countenance, is of itself sufficient to convince us of the extraordinary talent of that great artist. The drawing is well preserved, the light and shade admirably managed, and the drapery round it peculiarly fine.

Commence as usually with the lines to guide the disposition of the features of the Face, as in the preceding Plate, being particularly careful they are very light. Then sketch the Eyes, Nose, and Mouth, on the lines, as directed in the same Plate. The Beard, the Forehead, and the Cheek bones will be the next consideration. Then follows the Drapery.

When the outline is correct, proceed to finish with chalk or pencil, to the effect of the original.

Engraved by H. Bushy from Raffaelle.



Engraved by T.L. Busby from Raffaelle.

PLATE VIII.

This is another Head selected from the Cartoons, and is an additional proof of the abilities of that superior artist. The countenance of this Head is widely different from the last. The light and shade have a wonderful effect.

Commence, as you invariably must, by placing the foundation lines as a guide for the features, and then proceed as described in the last Plate.

This lesson will be found very useful as an example of light and shade, and therefore is particularly recommended as a study. As there is a great quantity of colour, you must, of course, execute all the lines boldly and decidedly; and always the greater the colour of the subject, so much the stronger must it be commenced.

PLATE IX.

In this Head, the passion Rapture is admirably described. It is copied from the famous *Le Brun*, whose abilities in pourtraying the passions are well known. How easy it is to discover the soul-like gratification of this countenance!

In commencing, begin by faintly sketching the fundamental lines, that the features may take their right situation. As this head is looking up, the curves must bend upwards, as described in Plate VI.

Sketch lightly the features of the face, being particularly careful to place the ear in its right situation. When a correct outline is obtained, put in the dark shadows; as those under the eye-brows, the pupil of the Eye, under the Nose, inside of the Mouth, and under the Chin; then proceed to finish it by touching with the pencil or chalk, until the effect of the Plate is obtained.

RAPTURE.

Engraved by I.L.Busby from L. Brun

Engraved by T.L.Busby from Le Brun.

ADMIRATION.

PLATE X.

HERE the student is presented with another of the Passions from Le Brun, and it is scarcely necessary to say, it represents the feeling of ADMIRATION. It fills us, indeed, with admiration to see such correct features put together, and expressing so happily the sentiment. We never know which to admire most in this artist, his extraordinary execution, or his sublime conception.

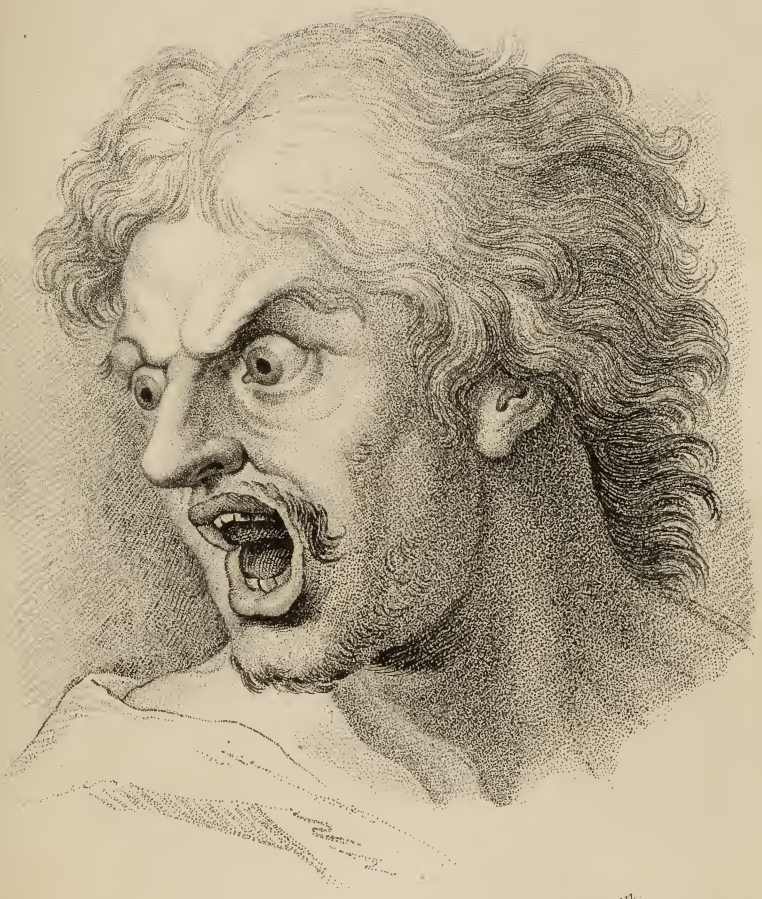
Proceed, as described in Plate VI. being careful in disposing the features, as that is the foundation; and as all the attention afterwards paid to the finishing will be lost if the features are not properly placed.

PLATE XI.

TERROR OR FRIGHT.

The violence of Terror acts powerfully on every feature of the Face. The Muscles are in extreme action; the Eyes are open, and the Balls are seen in full; the upper Eyelids are hid under the Brow; the Nose is drawn up; the Mouth is extended, with its corners very conspicuous; and the Muscles of the Neck are also protruded.

In delineating this subject, attention must be given to the preceding remarks, as it is essentially requisite to study the character of every subject before its delineations are began. The same fundamental principle must be adopted, as in the last four Plates, being particular in leaving the lights on the Forehead, Nose, Cheek-bone, &c.



Engraved by T.L.Busby. from Le Brun

FRIGHT.


T. S. Busby, Sc.

PLATE XII.

THE HAND.

This Plate represents Hands and Arms, selected from the works of *Raffaelle*, and others. The attention of the student is particularly required to these extremities of the Figure, as it is often painful to see a well-executed performance ruined through neglect in delineating these parts.

Strict attention must be paid to the joints of the Fingers, to the Nails, and to the uniting of the Hand to the Wrist. When the outline is correct, proceed to shade with care and attention, recollecting that the object of shadowing is to produce the effect either of a convexity, concavity, or flat surface.

PLATE XIII.

THE FEET.

The extremities here selected are likewise from the same artists, and they afford examples of Feet in various positions, in front, profile, and fore-shortened.

Great attention must be paid to the Joints and Nails of the Toes. It will be likewise necessary to remember that the toe next the great toe is the longest, and more separated from each other than the smaller toes. When you have a complete outline of each, put in the shadows of the Feet, and the dark touches under and between the Toes, which will be a guide to the finishing.

J. S. Busby, Sc.

T. L. Busby, Sc.t from Cipriani

PLATE XIV.

The subjoined Engraving, is from *Cipriani*, whose delineations of Children have rendered his works eminently celebrated. The actions of the Figures are excellent as emblems of *Cowardice*, *Courage*, and *Unconcern*.

Sketch in lightly the disposition of the Figures, recollecting that all the Limbs must have a greater roundness than in *Adults*. When the Figures have been correctly disposed, with careful decision touch in the Eyes, Nose, Mouth, and exterior of the Limbs, being particular not to make them too dark, that they may be corrected in case they should be incorrect.

PLATE XV.

This Plate is likewise engraved from *Cipriani.*

The upper subject represents a Child sleeping; the bottom a Boy reading.

Boy Sleeping. The Head of this Child is *fore-shortened,* and rests on the right shoulder. In drawing this subject, the chief difficulty to the student will be to delineate the Head, and he must be careful in the disposition of the fundamental lines for the features. When he has thus properly begun, he may proceed to mark in the features of the Face, and proceed as before.

Boy Reading. The fixed attention of this boy proves that *Cipriani* well understood the infantine character. In copying it, take care to sink the Head on the Shoulder, to bend the Belly inwards, and to fix the left Hand well on the Thigh.

Etched by T.L. Busby from Cipriani

Engd. by T.L. Busby from Morland.

PLATE XVI.

This Plate has been engraved from an original sketch of Morland's. *Nature* was never more bountiful to any man, than to this eccentric genius; the facility of his touch and the rapidity of his pencil were wonderfully great.

This subject is engraved so as to represent a chalk drawing, and may be copied either in black or red. The execution must be bold, firm, and decisive.

PLATE XVII.

The annexed Plate is likewise from Morland. What beautiful rustic simplicity is evident in the countenance of the Female!

In copying this subject, the Face must be the first and principal consideration. The Cap, Shoulders, and Arms, must be the next. The Male Hand that grasps the Hand of the Female must also be particularly attended to. The execution of the whole cannot be too free and bold. Freedom is requisite in all drawings; but it is particularly so in this style.

Engraved by T.L. Busby from Morland.


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PLATE XVIII.

THE BONES.

The Bones are the frame work and supports of the Human Body, and the Muscles are the mechanism which move the Bones. The Bones are joined to each other, in the manner of a ball and socket, in some cases, or like a hinge in others, and the Muscles when they act, contract, or become shorter, and by that means draw the Bones different ways.

The names of the several Bones are indicated by the figures as beneath.

1. Os Frontis, or Bone of the Forehead.
2. Os Parietalia.
3. Os Malae.
4. The Upper Jaw.
5. The Lower Jaw.
6. The Clavicula, or Collar Bone.
7. 7th, or last true Rib.
8. 12th, or last of the five false Ribs.
9. The five Lumber Vertebræ, with their intermediate Cartilages.
10. Os Sacrum.
11. Os Ilium.
12. Os Ischium.
13. Os Pubis.
14. The Humerus, or Bone of the Arm.
15. The Radius.
16. The Ulna.
17. The Bones of the Carpus, or Wrist.
18. The Bones of the Mitacarpus, or Hand.
19. The Bones of the Fingers.
20. The Femur, or thigh Bone.
21. The Patella, or Knee Pan.
22. The Tibia, or the larger Bone of the Leg.
23. The Fibula.
24. The os Calcis, or Heel Bone.
25. The Tarsus or Instep, composed of six Bones, besides the os Calcis.
26. Bones of the Metatarsus or Foot.
27. Bones of the Toes.

PLATE XIX.

THE MUSCLES.

1. Sterno hyoidæus.
2. Mastoidæus, Plate XX.
3. Trapezius, Plate XXI.
4. Pectoralis.
5. Deltoides, Plate XX.
6. Biceps.
7. Brachiæus internus. *This is partly covered by the* Biceps, *and is marked with two Figures, to prevent its being taken for two Muscles.*
8. Gemellus, Plate XXI.
9. Pronator rotundus.
10. Supinator Radii longus.
11. Flexor Carpi radialis.
12. Flexor Carpi ulnaris.
13. Palmaris.
14. *The mass of Flesh that appears under the* Flexor Carpi radialis, *and the* Palmaris *is composed of the* Perforatus *and* Perforans.
15. Extensor Carpi radialis, Plate XX.
17. Extensor Pollicis, Plate XX.
20. Serratus major anticus, Plate XX.
21. Obliquus descendens, Plate XX.
22. Rectus.
31. Triceps.
32. Membranosus, Plate XX.
33. Sartorius.
34. Gracilis, Plate XXI.
38. Rectus Femoris.
39. Vastus externus.
40. Vastus internus.
41. Tibialis anticus.
42. Gasterocnemius, Plate XXI.
43. Soleus, Plate XXI.
44. Peronæus, Plate XX.
45. Extensor Digitorum Pedis.


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PLATE XX.

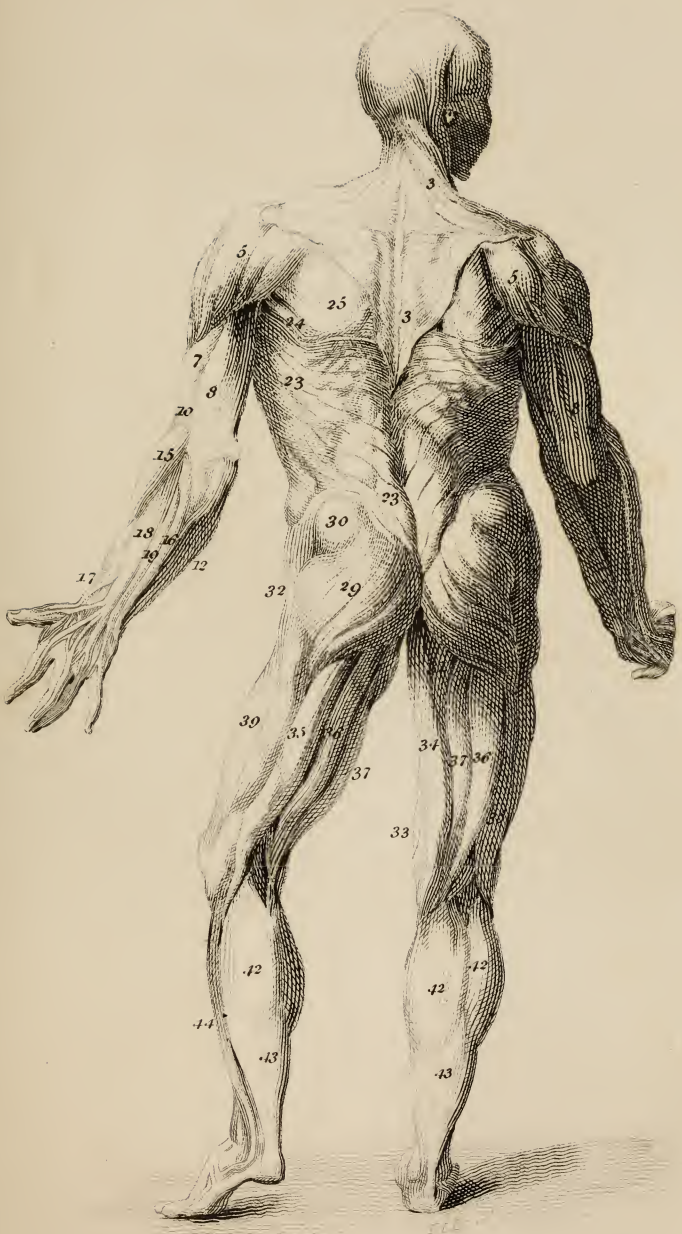
THE MUSCLES.

2. Mastoidæus.
3. Trapezius, Plate XXI.
5. Deltoides.
6. Biceps, Plate XIX.
7. Brachiæus internus, Plate XIX.
8. Gemellus, Plate XXI.
9. Pronator rotundus, Plate XIX.
10. Supinator Radii longus, Plate XIX.
11. Flexor Carpi radialis, Plate XIX.
12. Flexor Carpi ulnaris, Plate XIX.
13. Palmaris, Plate XIX.
15. Extensor Carpi radialis.
16. Extensor Carpi ulnaris.
17. Extensor Pollicis.
18. Extensor Digitorum.
19. Extensor minimi Digiti.
20. Serratus major anticus.
21. Obliquus descendens.
23. Latissimus Dorsi.
24. Teres major.
25. Infraspinatus.
29. Glutæus major, Plate XIX.
30. Glutæus medius, Plate XIX.
32. Membranosus.
33. Sartorius, Plate XIX.
34. Gracilis, Plate XIX.
35. Biceps Femoris, Plate XIX.
36. Seminervosus, Plate XIX.
37. Semimembranosus, Plate XIX.
39. Vastus externus, Plate XIX.
40. Vastus internus, Plate XIX.
42. Gasterocnemius, Plate XIX
43. Solæus, Plate XIX.
44. Peronæus.

PLATE XXI.

THE MUSCLES.

2. Mastoidæus, Plate XX.
3. Trapezius, or Cucullaris.
5. Deltoides, Plate XX.
7. Brachæus internus, Plate XIX.
8. Gemellus.
9. Anconæus.
10. Supinator Radii longus, Plate XIX.
12. Flexor Carpi ulnaris, Plate XIX.
15. Extensor Carpi radialis, Plate XX.
16. Extensor Carpi ulnaris, Plate XX.
17. Extensor Pollicis, Plate XX.
18. Extensor Digitorum, Plate XX.
19. Extensor minimi Digiti, Plate XX.
23. Datissimus Dorsi, Plate XX.
24. Teres major, Plate XX.
25. Infraspinatus, Plate XX.
26. Splenius.
27. Sacrolumbaris.
28. Longissimus Dorsi.
29. Glutæus major.
30. Glutæus medius.
31. Triceps, Plate XIX.
32. Membranosus, Plate XX.
33. Sartorius, Plate XIX.
34. Gracilis.
35. Biceps Femoris.
36. Seminervosus.
37. Semimembranosus.
42. Gasterocnemius.
43. Solæus.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Engravd by T. L. Busby

HERCULES, *from the Antique.*

PLATE XXII.

HERCULES.

This Colossal Figure is an admirable production of art, and represents great muscular strength. It is in an easy position, the muscles being strongly marked, but all at rest.

Lightly sketch in the inclination of the Figure; then consider the proportion of each part, bearing in mind the divisions of the body; and do not fail to draw the lines for the proportion of the features of the Face. When the Figure is rightly placed, correct, with attention, the features of the Face, the muscles of the Body, &c.; and proceed by shadowing to the effect of the original.

PLATE XXIII.

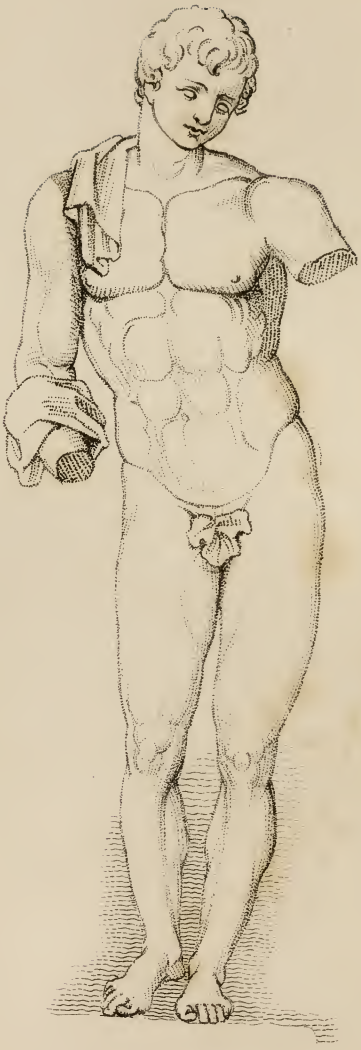
APOLLO AND ANTINOUS.

The Student is here presented with a side view of the *Apollo Belvidere*, and of the *Antinous*, two antique figures.

These may be drawn in chalk or pencil, taking care to fix the Figures well on their feet, so that they appear to stand firm and solid. It is too common an error in drawing to be neglectful in this respect. How ridiculous it is to see a Figure that should stand firm on its feet, tottering as though it had received a sudden blow.

Fail not to consider the exact proportions of the several parts as you proceed in their delineation.

APOLLO.



ANTINOUS.

Engraved by T.L.Busby.

Engravd by T.L.Busby.

LAOCOON,
from the Antique.

PLATE XXIV.

THE LAOCOON.

This is the centre Figure of the celebrated Laocoon (a groupe of three Figures in marble) which was discovered at Rome in the year 1508, in a recess of the ruins of the baths of *Titus*, where *Pliny* described it as standing in the reign of that Emperor.

The attentive study and repeated copying of this *chef-d'œuvre*, is recommended to all Students.

It may be drawn in chalk or pencil. The convulsed character of the Head should be preserved, and the *Clavicula*, or Collar Bone, should be well fixed. The Muscles of this Figure are in extreme action owing to the contest with the Snake, and this study forms, therefore, a contrast to that of the Hercules, Plate XXII.

PLATE XXV.

ANIMALS' HEADS.

The annexed Plate represents the Head of a Sheep, of a Greyhound, and a Bull Dog, and they are engraved in imitation of chalk sketches.

In delineating the Heads of *Animals*, a similar principle to that adopted in the Human Head, in regard to the disposition of the features varying according to their several characters, ought to be attended to. For example, the distance of the bottom of the Nose from the Eyes in the Sheep and Greyhound are widely different from the Bull Dog: yet we find the same feature invariably fixed in the centre of the Head between the Eyes. The Eyes of all Animals are features that should be particularly studied.

Engr.d by T.L. Busby

Engraved by T.L.Busby.

PLATE XXVI.

THE GOAT.

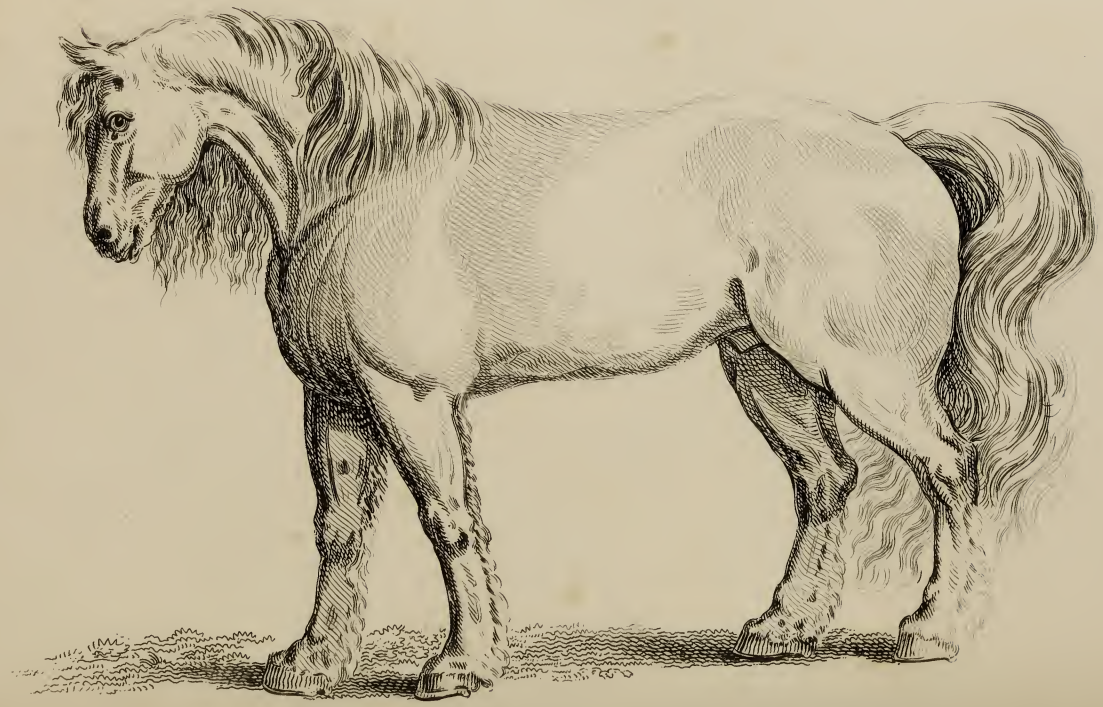
This hardy Animal is likewise engraved to represent the chalk style. In delineating this subject the sharp-pointed character of the Head, the flowing Beard, the hairy Body, and the square formed character of the Legs and Hoofs should be preserved. The appearance of this Animal is very picturesque, owing to the contrast of form. Be particular in attaching the Ears well to the Head, the Head to the Neck, and the Feet to the Body.

PLATE XXVII.

THE ASS.

The Head of this Animal is shewn in front, it will therefore be advisable to draw the lines for the disposition of the features, as in the human Head, taking care to place the Ears exactly over the Eyes, and to unite the Limbs well to the Body. It is unnecessary to describe the progress, as that has been amply done in the preceding Plates.

Engraved by T.L.Busby.



Engraved by T. L. Busby.

PLATE XXVIII.

THE HORSE.

This Animal is etched as an example to be drawn with pen and ink, or pencil, and will give an idea of the useful art of etching.

When the Student has attained a correct outline with the pencil, he must prepare two Crow quill pens, to mark different strengths of colour. He should likewise prepare two or three different degrees of colour of Indian-ink; he will then get a complete outline of the whole, with the ink according to the colour of the original. He may then proceed to finish it to the effect of the Etching.

PLATE XXIX.

A WILD BOAR AND DOG.

This subject is a Wild Boar badgered by a Dog; the boar is worked up to a pitch of madness, which is indicated by the fire of his Eyes, the erection of his Ears, and his half-opened Mouth. The position of the Dog is teasing, but cautious. In delineating this subject, take care to fix the Boar well within the weeds, give the natural turn to the Head, and fore-shorten the Side.

Engraved by T. L. Busby.

Engravd by T. L. Busby.

PLATE XXX.

BULL AND COW.

This lesson represents a side view of a Bull, and a perspective one of a Cow; the contrast between the colour and positions of the two Animals produces a pleasing effect. In delineating this subject, great attention must be bestowed on the position of the Animals, particularly the Cow, which will be found an excellent example of fore-shortening. When you have a complete outline, proceed as previously described, paying particular attention to the anatomy, which is correctly preserved.

PLATE XXXI.

OUTLINE GROUPES.

The Student is here presented with Groupes in outline, containing varieties to be copied with the Crow-pen and ink, or pencil.

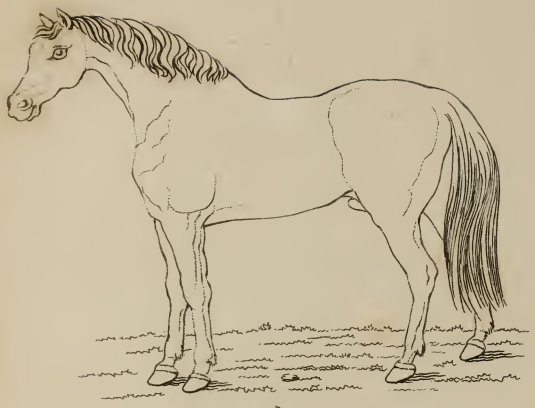
The upper subject is a Groupe of Travellers selected from *Bewick.*

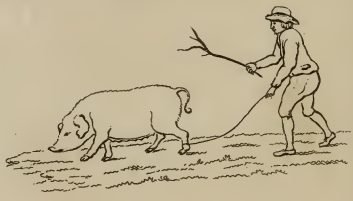
The centre is from the famous picture of Hogarth's *Canvassing for Votes.*

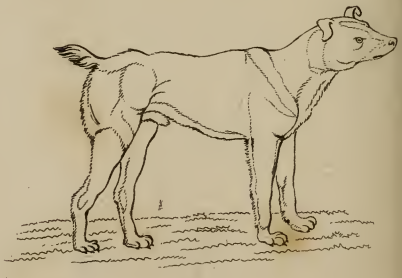
The bottom is a group of *Sheep and Cows,* from *Howett.*

The Student, in drawing in this style, need not be told that he must be very exact, as there is nothing to recommend it, but a correct and spirited outline, for it has not the assistance either of shade or colours.

GROUPES IN OUTLINE.







OUTLINES.

PLATE XXXII.

OUTLINE GROUPES.

THE annexed Plate consists of outlines for exercise. The upper subjects are the *Arabian Horse* and *domestic Cat.* But students who desire to extend their practice on animals, should procure CHALON'S folio, which at 12*s.* furnishes every variety of animals and positions.

The centre is a blind Man passing a bridge.

The bottom is a group of Turks, &c.

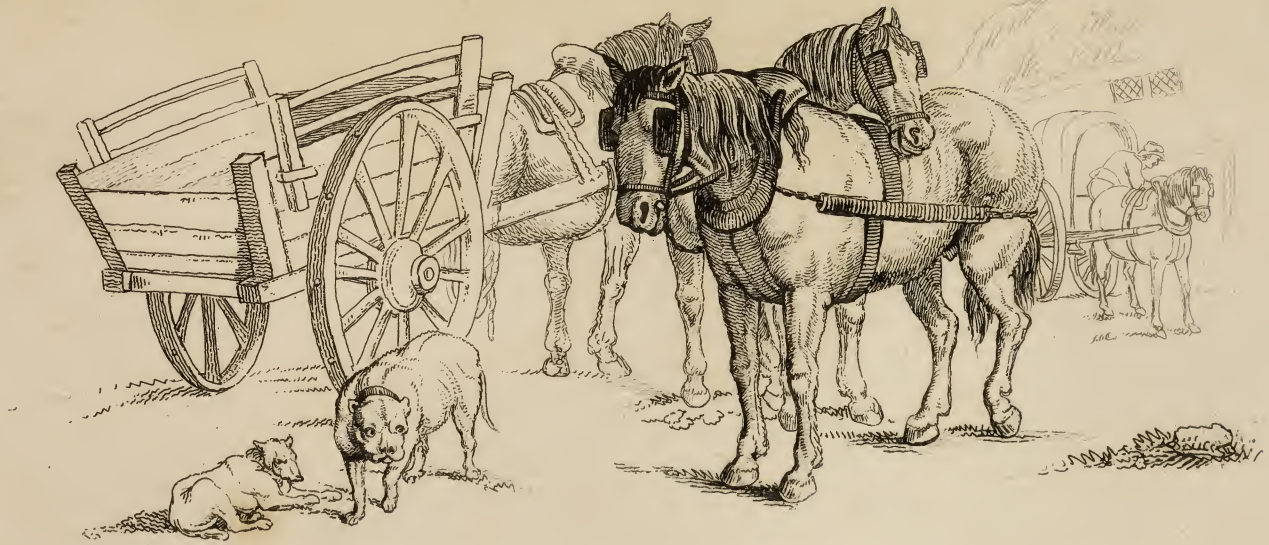
In delineating the Horse, be particular to preserve its grace. In the blind Man passing the bridge, as the wind has blown his hat off, take care to bend the trees with the wind, in a uniform manner.

PLATE XXXIII.

GROUPE OF HORSES.

This groupe of Horses, Dogs, &c. from *Howett*, may be drawn either with pen and ink, pencil, or chalk.

Every Animal in this subject affords a useful exercise in the practice of fore-shortening. The last Horse in front is very effective. The fore-shortening of the Horse behind him is well managed. The perspective of the Cart, in the second distance, is happy.



Engraved by T. L. Busby

PLATE XXXIV.

THE MILITARY MACAW.

As but one Plate is given in this department of drawing, it is in Colours.

Having sketched the outline correctly, put in the shadows with Indian-ink, so as to produce the rotundities, leaving breadths of light for the pure Colours. When the drawing of the subject is correct, proceed with the Colours as follow:

The Bill in Vandyke Brown, with a little Yellow.

The Red Tuft on the Head with pure Carmine and Gamboge, shaded with Lake.

The Circle of the Eyes with Gamboge and Carmine.

The Neck and Body with Gamboge and Prussian Blue, shaded with Lake and Blue, carefully mixed to form a neutral Tint.

The Wings with Indigo, and shaded with Lake and Indigo.

The Red Feathers on the Tail with Carmine, and shaded with Lake and Blue.

PLATE XXXV.

PROGRESSIVE LESSONS—COTTAGES.

This lesson represents two Cottages in three progressive States; the first in outline; the second in outline and half finish; and the third finished.

After the outline is completed, mix in saucers, three or four different degrees of Tint of Indian-ink, as nearly as possible of the Colours of the original. Take the lightest Tint, and wash it carefully, as in the half Tint subject, being particularly careful to leave the high lights. When it is perfectly dry, take the second Tint, and proceed as in the finished subject; then the third. Then should follow the spirited finishing and effective touches.

In Imitation of Indian Ink.

PLATE XXXVI.

COTTAGE LANDSCAPE.

The Student is here presented with an example of Cottage Scenery, which is followed by another; this style of Drawing being pleasing and expeditious.

Be careful to obtain a correct outline with a lead Pencil, and to be spirited in the parts that require spirit. Then mix a Tint of Colour no stronger than the lightest Tint in the original, washing that over the whole drawing, but leaving the high lights. When that is done, take the second Tint, and work that over the drawing, omitting the light parts; then let the third and fourth Tint, and then the finishing and spirited touches follow.

PLATE XXXVII.

COTTAGE LANDSCAPE.

This subject represents the Perspective View of a Cottage, situated at the bottom of a Hill; and a piece of Water is introduced in shade. The Hill behind the House is in a deep Tint, and the principal light is thrown on the Cottage, and the edges of the Clouds. The Student will, of course, commence with the Sky and Clouds; then touch the Hills; and lastly, the fore-ground, being very particular in having the different degrees of tints carefully mixed before he begins.

In Imitation of Indian Ink.

In Imitation of Indian Ink.

PLATE XXXVIII.

LANDSCAPE, WITH HORSES AND WATER.

This subject is from Howitt. The principal light is thrown on the White Horse, to effect which a dark Horse is introduced. The water is still and transparent, and this must be carefully attended to in the drawing. The same process of tinting is required in the execution of this subject as described in the last four Plates; that is, proceed from the greatest distance to the fore-ground. This subject may be drawn in Indian-ink, or sepia.

PLATE XXXIX.

PLAIN LANDSCAPE.

From Varley.

PREPARATORY FOR COLOURING.

THE Student is first to sketch the outlines faintly with a Black Lead Pencil, and then proceed with the Hair Pencil to tint and shadow without the intervention of the Crow Pen, or without any other fixed outline than what the tints and shadows produce.

The mixture of the grey Colour is made of burnt Umber, Indigo, and Lake, each to be rubbed in a Saucer separately, and then mixed in due proportion in a fourth Saucer, so as to produce the exact Colour, which may be called a warm Grey.

The Colour is then to be thinned with Water, for the light tints, as the sky, distances, &c. Deeper tints are to be used for the darker shadows, and near parts, fining off, and softening with water, till the exact effect is produced.

He may then proceed to colour as described in the next Plate.

Varley delin.

PLATE XL.

COLOURED LANDSCAPE.

This beautiful subject is from a drawing of that truly ingenious Artist Mr. Varley, who has obligingly favoured us with a list of the colours used by him in drawing; together with the mixtures prepared under his direction, and which render mixtures unnecessary on the part of the Pupil.

COLOURS USED FOR COLOURING DRAWINGS.

Coal Brown.
Rosy Madder.
Prussian Blue.
Indigo.
Brown Sienna.
Roman Ochre.
Yellow Ochre.
Venetian Red.
Gamboge.
Burnt Sienna.
Lamp Black.
Vandyke Brown.
Purple Lake.

From the above, mixtures have been made, which are sold by all dealers in Drawing Materials.

The *Clouds* are produced by a thin mixture of Indigo and Lake.

The *Azure Sky*, towards the horizon, is of Lake and Gamboge, and should be done with a clear brush.

The *lower or horizontal Clouds* are tinged with Ultramarine.

The *distant Lands* are of Ultramarine and Lake.

The *distant Trees* are also of Ultramarine, with a wash of Indigo, Gamboge, and burnt Sienna.

The *middle distance Trees* behind the House, are produced by a thin wash of burnt Sienna and Gamboge.

The *near Trees* are tinted with a wash of burnt Sienna, Indigo, and Gamboge. Towards the shadows more Indigo is incorporated.

The *Grass* is washed with a mixture of burnt Sienna, Indigo, and Gamboge. That in shadow on the right hand has rather more Indigo.

The *road* and *paths* are produced by a mixture of Lake, burnt Umber, and burnt Sienna.

The *House* is tinted with a mixture of Lake and Gamboge. The tiling and shadows have an excess of Lake.

The *Windows* are of Indigo and burnt Umber.

The *Smoke* is Lake and Indigo.

The *Sheep* are of burnt Umber and Gamboge.

The *Figures* are touched with Lake and Indigo.

PLATE XLI.

SEA PIECE FROM VANDERVELDE.

In this department of Art, the Student is presented with a coloured Plate, in two States, the subject from *Vandervelde*, who in Sea Pieces stands unequalled. We do not know which to admire most, the transparency of the Water, the composition and aëreal effect of the sky, or the rigging and setting of the Vessels in the Water. These beauties are conspicuous in this lesson, and care must be taken to produce the same transparent effect.

After the outline has been finished, with a compound of Burnt Umber, Indigo, and Lake, mixed to the colour of the first state, gradually produce the effect of the parts; and when careful observation evinces that you have succeeded, proceed to finish the entire subject.

PLATE XLII.

SEA PIECE FROM VANDERVELDE.

IN COLOURS.

Sky.—Indigo and Ultramarine, and towards the Vessel in the fore part of the Picture, to be blended with a compound of Lake and Yellow.

Water.—Thin washes of Lake, Yellow, and Ultramarine, separately used, guided by the judgment of the Student.

Distant Vessels.—Thin washes of Lake and Yellow.

Vessel in the fore Part of the Picture.—Sails, burnt Terra Sienna, Gamboge, and burnt Umber. Body of Vessel, burnt Umber.

PLATES XLIII. and XLIV.

GROUP OF FLOWERS.

OUTLINE with a compound of Lake, Blue, and Yellow, and with the same cautiously produce the effect of Plate XLIV.

Remarks.—Care must be taken in the outlining of this Subject that it is not too heavy, particularly in the middle of the Group, so that the breadth of light may not appear frittered or broken.

PLATE XLV.

GROUP OF FLOWERS.

White Rose.—Ultramarine, Burnt Umber, and Lake mixed together.

Hedge Rose.—Carmine and Gamboge.

Convolvolus.—Ultramarine.

Rose over Convolvolus.—Flower, Carmine; Stalk, Prussian Blue and Yellow.

Flower.—Top of Group, Centre, Gamboge; Ultramarine and Carmine mixed for the other parts.

Leaves.—Prussian Blue and Gamboge.

PLATE XLVI.

GROUP OF FLOWERS.

White Rose. — Finest rich light tints of Ultramarine, Carmine, and Gamboge, used separately.

Hedge Rose.—To be finished with Carmine, principally, and followed with light tints of Ultramarine and Gamboge.

Convolvolus.—Ultramarine principally, followed with light tints of Yellow and Carmine.

Rose over Convolvolus.—Principally finished with Carmine, thin light washes of Ultramarine and Yellow.

Flower top of Group.—Lake, Ultramarine, and Gamboge.

Leaves.—Prussian Blue, Lake, burnt Sienna, and Gamboge.

PLATE XLVII.

BUTTERFLIES.

These subjects require the same progressive treatment as the Group of Flowers: Lake, Gamboge, Ultramarine, Indigo, Vandyke Brown, burnt Umber, Black, and the Grey Tint, are the necessary colours.

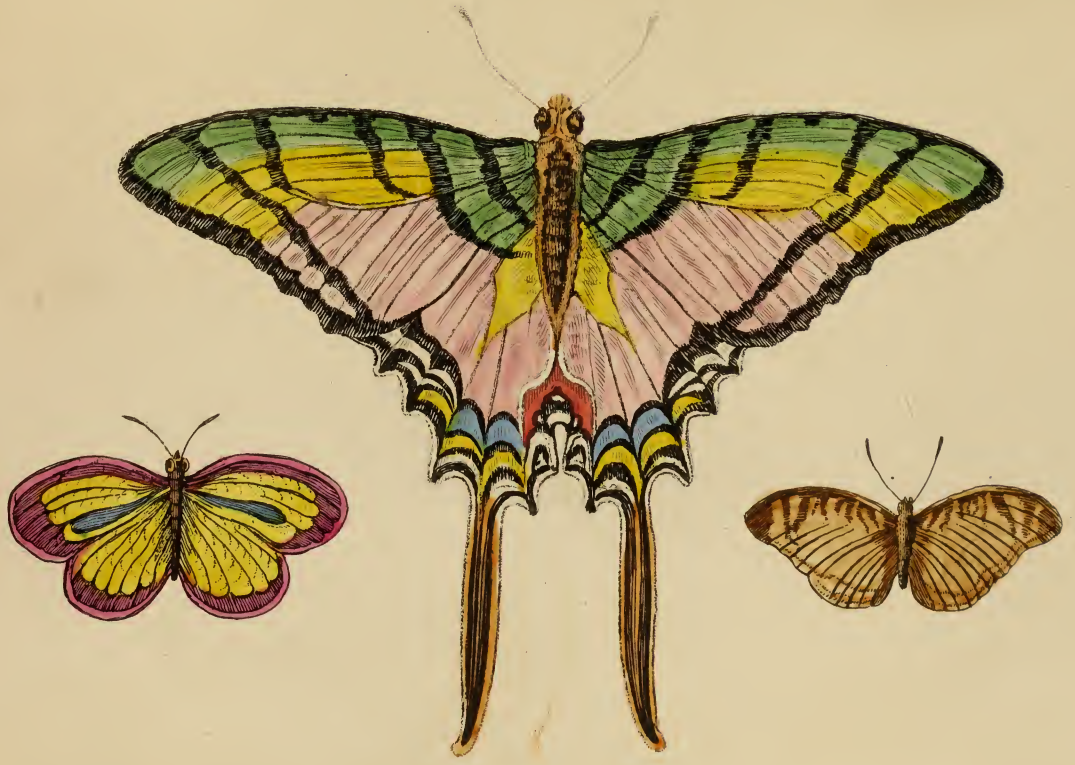


PLATE XLVIII.

PEACHES.

Peaches.—Produce with the Grey Tint the rotundity of the Peaches, then finish with Carmine, Gamboge, and Ultramarine, used separately.

Plums.—With a strong Grey Tint, produce the roundness, and finish with Carmine and Ultramarine.

Leaves.—Prussian Blue, Gamboge, and burnt Terra Sienna.

Fly.—Ultramarine, Gamboge, Carmine, and Black.

PLATE XLIX.

FISH.

This Lesson is engraved from Elmer, who stands conspicuously in this department of art. With a Tint (composed of burnt Umber, Lake, and Indigo), work in the outline, shadowing so as to produce the rotundities of the Fish. Then with pure colour tint the different parts, as near the lesson as possible. From that state work up to the effect of the original.

Carmine, Lake, Indigo, Ultramarine, burnt Umber, burnt Sienna, Gamboge, and Black, are the necessary colours.

SHELLS.

PLATE L.

SHELLS.

Brilliancy is as necessary in Shells as in Flowers or Fruits, and the principles of colouring must be followedas was recommended in them.

Lake, Gamboge, Ultramarine, Indigo, Vandyke Brown, burnt Umber, burnt Sienna, and the Grey Tint, are the colours necessary to be used in this department of drawing.

The Student must be careful that the bright light of the Shells is of pure colour, and he should use a little of the Grey Tint in the shadows, so as to give an additional lustre to the lights.

THE END.

SHACKELL AND BAYLIS, JOHNSON'S-COURT.